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| The System and Force Structure Cost Analysis | e Model (SAFSCAM) is a |
| flexible computer model that is used to facilitate | |
| | te cost estimation and |
| evaluation. This report describes, in detail, the model SAFSCAM that is programmed on the CDC (| te cost estimation and he input and output of |
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20. ABSTRACT (Continued)

In one computer run, SAFSCAM estimates and displays the static costs of the equipment and weapon systems relative to a specific fleet composition. The output includes four types of cost charts: the cost breakdown structure (CBS) elements by equipment for all ships in the fleet, the CBS elements by equipment for one ship in each class, the CBS elements for all ships in each class, and a summary of costs by ship class, equipment, contractor or government, and budget appropriation. The user has complete flexibility in the choice of the CBS, the level of detail to be costed, and the cost methodology. The model can use throughput costs and generate costs from cost estimating relationships (CERs).

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FOREWORD

The Combat Systems Department of the Naval Surface Weapons Center, Dahlgren, Virginia, was tasked by the Shipboard Intermediate Range Combat System (SIRCS) program office, PMS 404-40, to develop a computer model for use in estimating SIRCS life-cycle costs (LCCS).

The System and Force Structure Cost Analysis Model (SAFSCAM) was designed to meet this requirement. SAFSCAM development began in September 1976, by the late Dr. Barbara J. Bell, Combat Systems Department and Cornelia C. Mundy, Strategic Systems Department. It has been maintained and expanded by Michael R. Pabrinkis, Strategic Systems Department, and Carolyn P. Nelson, Combat Systems Department with direction from Alan R. Glazman, Combat Systems Department.

This technical report is the SAFSCAM User's Guide. It describes the model in terms of types of input data required, input formats, and output charts. Model documentation also includes a SAFSCAM Management Guide.

This report has been reviewed for accuracy by Alan R. Glazman.

Released by:

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SUMMARY

The System and Force Structure Cost Analysis Model (SAFSCAM) is a flexible computerized model that will be used by the Navy to facilitate weapon system life-cycle cost (LCC) estimates. SAFSCAM's basic purpose is to process and display equipment and weapon LCCs at the level of detail that will provide government program managers with the in-depth cost visibility required for orderly program planning and decision making.

To date, the model has generated weapon system LCC estimates for the Shipboard Intermediate Range Combat System (SIRCS) and the anti-ship missile defense (ASMD) programs. For these programs, the model proved useful in the following ways:

- Standardization of contractor estimates
- · Independent cost capability
- * Well-organized display of ship class and fleet LCC cost
- Concise display of LCC by budget appropriations
- . Test the effects of programmatic changes
- · Aid to performing top level trade-offs to system design

This report will describe the input and output of SAFSCAM in sufficient detail to allow the user to employ the model for cost estimation, evaluation, and analysis.

INTRODUCTION

BACKGROUND

SAFSCAM has a basis in the System LCC Model developed in 1975, for the ROLAND program office at the Missile Command (MICOM), Redstone Arsenal, Huntsville, Alabama. This model was designed to cost the ROLAND program. Its input and output formats and internal logic were specific to the costing needs of the ROLAND program; however, the model contained many of the features needed in a comprehensive cost model. Since the ROLAND model was programmed in FORTRAN IV on the CDC 7600 computer, and NSWC has a similar CDC 6700 computer, it was a logical candidate for the SIRCS program. The ROLAND model also has the ability to display, in one computer output, the costs by cost breakdown structure (CBS) for each equipment element in a weapon system. Thus, the costs of a total Navy system can be displayed. The model has been modified and expanded by the System's Cost and Simulation Branch, Combat Systems Department to make it a generalized LCC model.

SAFSCAM documentation consists of comments in the FORTRAN coding, the User's Guide, and the Management Summary.

CAPABILITIES

SAFSCAM's basic capability is that of processing and displaying equipment and weapon system LCC so that fast, flexible, and documented cost analyses can be performed. It allows the user complete flexibility in the choice of CBS elements to be displayed, the level of detail to be costed, and the cost methodology used to estimate system LCCs. The CBS is a data input to the model, and it is the same for each equipment element. SAFSCAM has the flexibility in the level of detail at which costs are estimated for any CBS element. Several subelements can be costed separately and then summed internally in the model to estimate the cost of a CBS element.

The model can use throughput costs or costs developed from cost estimating relationships (CERs).* The throughput costs are those developed external to the model. CER forms are in the program code permitting parameter input to use a CER for a particular equipment and CBS element application. Learning curve theory is available within the CER forms to develop costs at any production quantity from a cost at another quantity. The production quantity for each equipment element can be calculated from input data. Costs for each CBS element can be assigned to budget appropriations.

At present, SAFSCAM output includes four major cost charts. The first chart gives a breakdown by equipment of the cost for each element in the CBS. The second set of charts shows the LCC by equipment per ship. The third chart gives the LCC summed over all equipment elements per ship class. The fourth chart gives a summary of costs per ship class by budget appropriations.

MODEL DESCRIPTION

SAFSCAM is programmed in FORTRAN IV EXTENDED with one small COMPASS subroutine. It is currently running on the CDC 6700 under the SCOPE 3.4 operating system. There are 16 subroutines and 1 function that requires approximately 150,000 octal words of central memory. Execution time varies from 3 to 300 seconds (s) depending on the size of the input. SAFSCAM is configured to consider 43 ship classes and 40 different equipments; however, it has been demonstrated that it can cost-out 100 equipments across 9 ship classes with minor changes to certain arrays. It is also possible to input equipment at the ship level and equipment components at the equipment level; thus, causing the model to cost many components across several equipment

^{*} A CER is a linear or nonlinear regression equation. It relates the cost of a product to some measurable characteristic such as weight, speed, range (cost-to-noncost), or with costs of other items (cost-to-cost). CERs may be developed from historical data.

configurations. Appendix A is a listing and further description of the SAFSCAM subroutines.

Figure 1 is a flow chart of SAFSCAM's major functions. It gives a broad description of how the model starts with input data, processes this data in several ways, and generates four major LCC charts. This report addresses SAFSCAM's input and output in sections labeled accordingly.

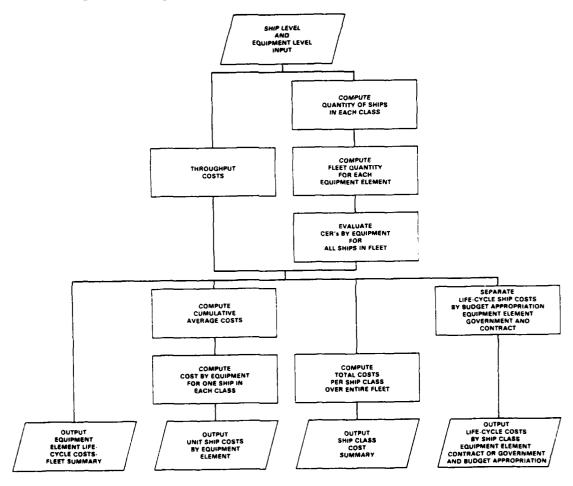


Figure 1. Major Functions of SAFSCAM

INPUT

This section of the *User's Guide* describes the input requirements of the model along with the mechanics of the cost estimating methodology. There are two basic levels of inputs needed for SAFSCAM: ship level (SL) and equipment level (EL) as shown in Figure 2.

The SL inputs are those that are independent of the equipment selected. These inputs include varying types of noncost information such as CBS, unit flyaway data, and installation schedule. The major portion of the input

is at the EL that includes equipment elements, quantities per ship, and equipment cost data.

- SHIP LEVEL
 - COST BREAKDOWN STRUCTURE (CBS)
 - BUDGET APPROPRIATION CODE BY CBS ELEMENT
 - UNIT FLYAWAY DATA
 - INSTALLATION SCHEDULE
- EQUIPMENT LEVEL
 - EQUIPMENT PER SHIP CLASS
 - EQUIPMENT COST DATA
 - THROUGHPUTS
 - CER DATA

Figure 2. SAFSCAM Input Levels

The input will be described in the same order as it is read by subroutine INPUPD.

- 1. Title and controls
- 2. Phase (SL)
- 3. CBS (SL)
- 4. Equipment elements per ship (EL)
- 5. Equipment element cost data
 - a. Throughput cost (EL)
 - b. CER data (EL)
- 6. Output control
- 7. Ship installation schedule (SL)
- 8. Unit flyaway data (SL)
- 9. Footnotes

Appendix B is the input format in summary form for easy use. The entire input stream is listed by the model as output and is given as a sample run in Appendix C.

TITLE AND CONTROLS

The first card of the input is the TITLE that identifies the case run. Its contents are the user's choice. The title can be coded anywhere in the first 26 columns. The second card, CONTROLS, provides some of the necessary controls for execution (see Table 1).

Table 1. Format for Title and Controls*

| Card Types | Input | Card Columns | Format | | | |
|------------|--------|--------------|----------|--|--|--|
| 1 | TITLE | 1-26 | 2A10, A6 | | | |
| 2 | NWBS | 1-5 | I5 | | | |
| | NPH | 6-10 | 15 | | | |
| | IPB(1) | 11-15 | 15 | | | |
| | IPB(2) | 16-20 | 15 | | | |
| | IPB(3) | 21-25 | 15 | | | |
| | | | | | | |

^{*} TITLE defines the case run.

NWBS is the number of elements in the CBS.

NPH defines the number of life-cycle phases.

IPB(1), IPB(2), IPB(3) define the CBS element number at which a page break will occur in the output charts.

PHASE

The same of the sa

The titles of the LCC phases, the first element number of the phases, and ROLLUP controls are defined on the PHASE cards. ROLLUP controls (NROLL) are the lowest cost levels for each phase at which the major LCC charts will be printed. The CBS can be input in great detail; however, the major cost charts may be desired at a reduced level. ROLLUP controls together with the cost level print control in the Output Control section provide for this reduced CBS level printout. The model allows up to four LCC phases (4 cards) as input (see Table 2). The standard breakdown is RDT&E, Investment, and Operations and Support.

Table 2. Format for Phase*

| Card Type | Input | Card Columns | Format |
|-----------|---------------|--------------|--------|
| 3 | IPHASE (1, K) | 1-10 | Al0 |
| | IPHASE (2, K) | 11-20 | A10 |
| | IPH (K) | 21-25 | 15 |
| | NROLL (K) | 26-30 | 15 |

^{*} IPHASE (1, K) and IPHASE (2, K) define the Kth phase in two words (K takes on the values 1 to 4 depending on the phase that is being input).

IPH (K) identifies the first CBS element number of the Kth phase.

NROLL (K) defines the lowest cost element level to be printed in the output cards.

Figure 3 is an example of the first three types of input cards.

| TES | T CASE | DATA | | | | |
|-----|--------|-------|-------|----|-----|---|
| | 148 | 4 | 35 | 68 | 108 | |
| RDT | &E | | | | 1 | 2 |
| PIL | OT PRO | DUCTI | ON | | 36 | 3 |
| FUL | L PROD | UCTIO | N | | 69 | 3 |
| OPE | RATION | & SU | PPORT | | 109 | 2 |

Figure 3. Title, Controls, and Phases

COST BREAKDOWN STRUCTURE

The CBS defines, in detail, the elements of the LCC phases of a program. The user must determine the elements to be included in the CBS. The elements would then be structured into a cost hierarchy indicating the relationship of each element to the entire CBS. An abbreviated list of CBS elements is given in Table 3. Some of the elements in the CBS are costed directly from input data as throughput costs or costed through the use of CERs. Costs for other CBS elements are the summation of costs for lower level elements.

Table 3. Cost Breakdown Structure

| - - | Appropriation | | Element | Cost |
|----------------|---------------|------------------------|---------|-------|
| No. | Code | CBS Element | No. | Level |
| (1) | RDT&E | RDT&E phase | 1 | 1 |
| (2) | | Investment phase | 2 | 1 |
| (3) | PROC | Nonrecurring | 3 | 2 |
| (4) | | Recurring | 4 | 2 |
| (5) | PROC | Contractor | 5 | 3 |
| (6) | PROC | Government | 6 | 3 |
| (7) | OMN | Operations and support | | |
| | | phase | 7 | 1 |
| (8) | | Total | 8 | 1 |

The inputs for each CBS element are the element number, the budget appropriation code, the element name, and the cost level (see Table 4).

Table 4. Format for CBS*

| 5 1 6 C | Input | Card Columns | Format |
|------------|------------------------------|--------------|--------|
| 4 | SYSTEM | 1-10 | A10 |
| | System name (e.g., SAFSCAM) | 11-20 | A10 |
| 5 | TPUT | 1-10 | A10 |
| 6 | CBS element number | 1-20 | 2A10 |
| | Budget appropriation code(s) | 21-30 | Al0 |
| | CBS element name | 31-60 | 3A10 |
| | CBS element number | 61-70 | A10 |
| | Cost level | 71-72 | A2 |

^{*} SYSTEM must be the first word of the system name card. System name defines the name of the particular system that is being costed.

TPUT is input at this position to act as a signal to the model that a certain type of input will follow; namely, the CBS.

CBS element number is a unique identifier used in relating a throughput cost or CER cost data to a specific CBS element. The element number is an input in either the throughput or CER sections of the input data.

Budget appropriation code indicates the budget appropriation to which the cost of a CBS element should be allocated. These appropriations are research development, test and evaluation (RDT&E),

procurement (PROC), military construction-Navy (MCN), military personnel-Navy (MPN), and operations and maintenance-Navy (CMN). The PROC code may be further broken down to ship construction-Navy (SCN), weapon procurement-Navy (WPN) and other procurement Navy (OPN). This breakdown gives greater flexibility to the budget chart allowing for each equipment on each ship class to be assigned a different PROC code. Input of this breakdown occurs in the Equipment Elements per Ship section. A CBS element cost can be assigned to a single appropriation such as RTD&E or divided between two appropriations. If a CBS element cost is divided between two appropriations, this is indicated by RD/PR, PR/MC, MP/OM, etc.

 $\underline{\mathtt{CBS}}$ element name is a description of what costs are included for that \mathtt{CBS} element.

CBS cost level (1-10) indicates the position of an element relative to the total structure of the CBS hierarchy. Lower-level costs (indicated by a higher cost level number) will be summed to all successively higher cost levels. For example, in Table 3, recurring contractor and government costs (cost level 3) will be summed to give total recurring investment cost (cost level 2).

Guidelines

The following guidelines should be used in developing the CBS.

- 1. Card type 6 is repeated for each element in the CBS.
- 2. Input data may be positioned in any of the columns within the appropriate fields. The system name and CBS element name can contain alphabetic, numeric, or special characters.
- 3. The designation of the CBS element number in columns 1-20 of card type 6 must begin with an open parenthesis and end with a closed parenthesis. Blanks are allowed before and after the element number within these parentheses. For example, "(15)" is valid.
- 4. The order of the CBS input will be the order in which the CBS elements will be displayed in the output charts. The CBS elements must be in a logical sequence, so that lower-level costs will be summed to the proper higher-level costs.
- 5. The CBS can have a maximum of 150 elements including the total. The allowable number of CBS elements can be increased, if necessary, by changing the record length in the FORTRAN coding.
- 6. The CBS applies to all equipment elements. If there is no cost data for a CBS element, a zero will be shown in the cost output charts.
- 7. The CBS element names can be indented to indicate the cost hierarchy. This indentation is not required.

- 8. Each CBS element must have an element number. This number is used to relate cost data to a CBS element.
- 9. Each CBS element must have a cost level (1-10). Lower-level costs (indicated by a higher cost level number) will be summed to all successively higher cost levels.
- 10. Each directly costed CBS element should have a code or codes indicating the budget appropriations to which the cost will be allocated. If no code is given, the cost will not be included in the LCC by the budger appropriations output chart. The cost of a CBS element can be allocated to one budget appropriation or divided between two appropriations. The desired split between appropriations is indicated by (1) the first two letters of each code separated by a "/" (e.g., RD/CM indicates that the cost will be divided between the RDT&E and CMN appropriations) and (2) the percentage of the cost allocated to each appropriation. These percentages are designated in a data statement in INPUDD.
- 11. A CBS element can have CONTRACTOR or GOVERNMENT as the first word of its name. This indicates how the cost is allocated in the LCC by budget appropriations output chart. If the cost is a summation of lower-level costs, all lower-level costs will be allocated appropriately to either CONTRACTOR or GOVERNMENT. These lower-level CBS elements should not have CONTRACTOR or GOVERNMENT as the first word of their names. If a CBS element has a budget appropriation code, but is not identified as contractor or government, the cost is added to the contractor cost for the particular appropriation codes.

EQUIPMENT ELEMENTS PER SHIP

The equipment elements to be installed and operated on each ship in a class are defined in this section of input. This input and the Ship Installation Schedule will be used to generate the total operational and investment equipment quantities for use in some of the cost output charts. Table 5 gives an example of the input for the ship class name and the name and quantities of the equipment to be installed and operated on each ship of that class (see Table 6).

Guidelines

The following guidelines should be observed for the equipment elements per ship input.

- 1. The input sequence is a card giving the ship class name followed by a card for each of the equipment elements on the ship class.
- 2. The investment quantity will be less than the operational quantity when some of the equipment has previously been installed on the ship.

- 3. It is assumed that all ships in a class have the same equipment and operational and investment quantities. If any ship in a class has unique equipment or quantities, the user can give this ship a unique class name (e.g., HOC-A) and list the equipment peculiar to that ship.
- 4. The maximum number of ship classes and equipment elements are:
 43 ship classes, 29 equipment elements per ship class, and 40 unique equipment elements over all ship classes. (Coding changes may be made to alter this requirement).
- 5. The ship class name is preceded by the word, SHIPCLASS and the equipment element name is preceded by the word, EQUIPMENT. These words are required. The FORTRAN coding recognizes these words as indications that the following words are the name of a ship class or equipment element. The SHIPCLASS and EQUIPMENT cards (card types 8 and 9) are repeated until all ship classes and their equipments have been defined.
- 6. The ship class and equipment element names from this section of input will be used in the titles of the cost output charts. The names should be centered in the fields on card types 8 and 9 exactly as desired on the output charts. For example, first radar could be coded on card type 9 as FIRST and RADAR. On the output charts, this would appear as a two-line column heading FIRST.

RADAR

- 7. All ship class and equipment element names are read by the input editor subroutine INPUPD as strings of seven characters. Any alphabetic, numeric, or special character is valid. Where an equipment element name is best described by two strings (2 words), each word is read as a string of seven characters. This is done to allow names that will not fit in seven characters to be spread over two fields, and later used on two lines in the column headings of the cost output charts.
- 8. The first six characters of each ship class or equipment element name must be unique. This six-character string will be used to relate equipment elements per ship to the equipment elements' cost data. SAFSCAM forms the six-character string by inspecting the name fields, finding and left-justifying the first nonblank character and the next five characters including blanks with the provision that any string of consecutive interior blanks is compressed into one blank.

Table 5. Equipment Elements per Ship

| | Operational Quantity | Investment Quantity | Procurement Breakout |
|-----------------------|-------------------------|------------------------|-------------------------|
| Ship class A | 1 | 1 | OPN |
| Equipment first radar | 2 | 1 | SCN |
| Equipment missile | 20 | ā | WPN |
| Equipment 4 gun | | | |
| Ship class B | | | |
| Equipment first radar | 1 | 1 | OPN |
| Equipment missile | 40 | 10 | SCN |
| | | | · |

Table 6. Format for Equipment Elements per Ship*

| Card Types | Input | Card Columns | Format |
|------------|--|--------------|------------|
| 7 8 | NPUT SHIPCLASS | 1-4 1-10 | A4 A10 |
| | First word of ship class name (e.g., CGN) centered | 11-17 | A7 |
| | Second word of ship class name (e.g., CLASS) centered | 21-27 | A7 |
| 9 | equi Pment | 1-10 | AlO |
| | First word of equipment element name (e.g., FIRST) centered | 11-17 | A7 |
| | Second word of equipment Element name (e.g., RADAR) centered | 21-27 | A 7 |
| | Operational quantity per ship | 41-45 | A 5 |
| | Investment quantity per ship | 51-59 | A9 |
| | SCN, WPN or OPN | 61-63 | A 3 |
| 10 | \$END | 1-4 | A4 |
| | | | |

^{*} NPUT is placed on the card preceding all of the equipment elements per ship data to indicate that this particular type of data will follow. SHIPCLASS is placed in front of the actual name of the ship class to designate the ship class name as a storage key. EQUIPMENT precedes the name of the equipment to set up the equip

ment name as a storage key. SCN, WPN, or OPN are used to breakout the procurement costs into

SCN, WPN, or OPN.

SEND indicates the end of the equipment elements per ship data.

As an example of left-justification of the first nonblank character and compression of consecutive interior blanks to form a six-character string, consider the two words in the equipment element name: FIRE and CONTROL. SAFSCAM searches for the first nonblank character "F" and compresses the two blanks following the E to form the left-justified six-character string FIRE C.

An example of invalid names is the designation of two different radars as RADAR ONE and RADAR TWO. The first six characters RADAR are not unique.

EQUIPMENT ELEMENT COST DATA

Equipment element cost data may be entered as throughput or CER data. The method of costing can be different for each equipment element. Cost data for each equipment element is entered only once, even if the equipment is operated on more than one ship class. The order in which the equipment element cost data is entered is the order in which the column headings for the first two sets of cost output charts (Appendix C) will be printed. For each equipment element, the cost data can be placed in the TPUT or CER subsections. Throughput costs are entered in the TPUT subsection; CER cost data are entered in the CER subsection. These subsections can be in any order within an equipment element. For example, the CER subsection can precede the TPUT subsection. SAFSCAM identifies the subsection by the codes TPUT or CER. If there is no cost data for one of these subsections, the code need not be entered. For example, if all CBS elements for FIRST RADAR are costed by CERs, the TPUT subsection can be deleted (see Table 7).

Table 7. Format for Equipment Element Cost Data*

| Card Type | Input | Card Columns | Format |
|-----------|------------------------|--------------|--------|
| 11 | equi pment | 1-10 | A10 |
| | Equipment element name | 11-30 | 2A10 |

^{*} EQUIPMENT is an identifier to indicate that the cost data to follow will be for the equipment named. Equipment element name is the actual name of the equipment. It must be left-justified. The first six characters of the name must correspond exactly to the left-justified name in the Equipment Elements per Ship section.

Throughput Cost

Throughput cost data are those cost estimates external to SAFSCAM that do not require any calculation by the model for the first cost chart. Examples are costs of representative systems and LCCs that are fixed. For each equipment element, only one throughput cost per CBS element is allowed (see Table 8).

Table 8. Format for Throughput Costs*

| Card Typ | es Input | Card Columns | Format |
|----------|---|--|--|
| 12 | TPUT | 1-4 | A4 |
| 13 | CBS element numbers CBS element cost | 1-20 21-30 31-40 41-50 51-60 61-70 71-80 | 2A10 A10 A10 A10 A10 A10 A10 |

^{*} TPUT indicates that throughput costs are to follow.

CBS element numbers are the identifying number of the CBS elements for which costs are being entered.

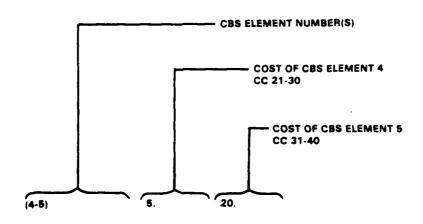
CBS element costs are the actual costs of the CBS element.

Guidelines

- Card type 13 is repeated until all throughput costs have been entered.
- 2. Data can be entered in any of the columns within the appropriate fields.
- 3. The designation of the CBS element numbers in columns 1-20 must begin with an open parenthesis and end with a closed parenthesis. A sequence of numbers within these parentheses is indicated by a dash between the first and last numbers in the sequence (e.g., (4-5) and (7-10).
- 4. A maximum of six costs can be entered on a card.
- 5. All costs on a card must be for sequential CBS elements and correspond in sequence to the CBS element numbers in columns 1-20. Examples are given below for CBS elements 4-5 and 7-10.

The throughput costs for CBS elements 4 and 5 are 5. and 20., respectively. The (4-5) indicates that the first cost in columns 21-30 will be for CBS element 4, and the next and last cost will be for CBS element 5.

- 6. An interruption in the CBS element number sequence requires that the next set of throughput costs be entered on another card.
- 7. Comment cards can be inserted in this subsection by entering an "*" in column 1.



CER Data

The cost of a CBS element can be estimated by a CER. These costs are referred to as CER data (Figure 6). A set of generalized CER equations (Table 9) has been incorporated in the FORTRAN coding. Each CER in Table 9 is a general equation containing no hard-coded parameter values. The set of CERs can be modified or increased by changing the coding in subroutine CERCOMP. In Table 9 each P represents an input parameter. This parameter could be a measureable characteristic or a factor calculated from a prior CER. A factor can be used in the calculation of another factor, until all information has been generated to cost a CBS element or subelement. When a particular cost is defined by a CER, the generalized forms from Table 9 that best suit the CER is chosen. Only the parameters P(1) through P(6) as specified by the cost data and needed by the CER form chosen are input as CER data.

Some of the CERs in Table 9 contain the symbols "Q1" or "Q2". These represent the total operations support quantity and investment quantity, respectively, of an equipment element over all ship classes. The quantities are calculated by SAFSCAM by multiplying the quantity of an equipment element on each ship in a class by the number of ships in that class and then summing over all ship classes (see Table 10).

Figure 6. CER Cost Data

| 7 | 0.000000 | 0. 6000°3 | 0 0 0 0 0 0 0 | 00000000 | 0.000000 | 0.00000 | 0000000 | 0.000000 | 0 0 0 0 0 0 0 | 0.000000 | 0.00000.0 | 00000000 | 0 0 0 0 0 0 0 | 0.000000 | 00000000 | 0.00000 | 0.000000 | 0.00000 | 0.000000 | 0 0 0 0 0 0 | 0.000000 | 0.000000 | |
|-------------|----------|-----------|---------------|-------------|---------------|-----------|-----------|-------------|---------------|----------|------------|-----------|---------------|----------|-----------|---------------|------------|-------------|------------|-------------|------------|------------|-------|
| μ. | 0.000000 | 9.00000 | 00000000 | 0.000000 | 0000000 | 0.0000.0 | 00000000 | 00000000 | 00000000 | 0000000 | 00000000 | 0.000000 | 0.000000 | 0000000 | 00000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | |
| × | 0000000 | 0.0000.0 | 0000000 | 00000000 | 0.00000 | 0.0000.0 | 00000000 | 2090.000000 | 0.00000 | 00000000 | 1.236000 | 0.000000 | 00000000 | 0.000000 | 0.0000.0 | 0.0000.0 | 0.000000 | 0.000000 | 24.090030 | 24.000000 | 2.030000 | 360.000000 | |
| c | 0.0000.0 | 0.00000 | 0000000 | 0.000000 | 0 0 0 0 0 0 0 | 0.00000.0 | 000000000 | .02230 | 0.00000.0 | 0.000000 | 6.000000 | 0.00000 | 0.00000 | 0.000000 | 0000000 | 0.00000 | 0.000000 | 0.000000 | 14.000000 | 15.00000 | 16.00000 | 16,000000 | |
| Œ | 1.166000 | 4.363000 | 50.00000 | 60.300000 | 50.063000 | 7.000000 | 16.20000 | 6.163300 | 7.000000 | 0.00000 | . 160969 F | 16.300000 | 0.000000 | 0.00000 | 1.063000 | 0 0 0 0 0 0 0 | 9.00.000 | 15.666000 | 1.203000 F | 1.260000 F | 1.663060 F | 1.00000 F | |
| (e) | 2.129030 | . 256000 | . 056900 F | . 1000000 F | .100030 F | 49.000000 | 140000 | 12.730060 F | 47.000000 F | 506060. | . 330400 | 6.030330 | . 020000 | .02000 | 35.033000 | 45.454545 | 3.530060 F | 14.036000 F | .020306 | .022000 | .066770 | . 022560 | |
| a | c.j | 0, | 0 0 | 0.0 | 00 | 00 | 0.0 | j. | 00 F | 650 | i.0 | , J | 550 | 670 | | 654 | 3 | J6 F | | ůů | 0 9 | | |
| S S S | 92 | 56 | 16 | 16 | 16 | 22 | 16 | 1.3 | 92 | æ | 18 | 56 | œ | •0 | 92 | • | 16 | 23 | 1: | 13 | 1.3 | 13 | |
| EOUIPHENT C | F 633 | C 521 | C 530 | C 5 90 | C 636 | F 47 U | F 60 | F 70 | ງ 65 ເ | 099 ລ | F 80 | C 676 | C 691 | 269 D | F 146 | F 90 | F 150 | F 166 | C_711 | C #15 | C 713 | C 714 | 2 : S |

A: Cost Element Row Number or Factor Number B: Designates whether CPR walls seemed.

Designates whether CER value cumulates with another $\ensuremath{\mathsf{CER}}$

CER Number

Cost Element Reference, e.g., CFR for Row 66 dependent on row 65 computation : ::

E-J: CER parameter values O: No value entered

Table 9. CER Generalized Forms

| CER Number | CER Form |
|------------|--|
| 1 | $C = P(1) \times Q2^{P(2)}$ |
| 2 | $C = P(1) \times Q2^{P(2)} / P(3)^{P(4)}$ |
| 3 | $C = P(1) \times P(2)^{P(3)} / P(4)^{P(5)}$ |
| 4 | $C = P(1) \times ((Q2 + P(2))^{P(3)} - P(2)^{P(3)})$ |
| 5 | $C = P(1) \times ((Q2 + P(2))^{P(3)} - P(2)^{P(3)}) / P(4)^{P(5)}$ |
| 6 | $C = P(1) \times ((P(2) + P(3))^{P(4)} - P(3)^{P(4)}) / P(5)^{P(6)}$ |
| 7 | $C = P(1) \times P(2) \times Q2$ |
| 8 | C = P(1) x Cross-referenced CBS element cost |
| 9 | $C = P(1) \times P(2)^{P(3)} \times Q2^{P(5)}$ |
| 10 | $C = P(1) \times P(2)^{P(3)} \times P(4)^{P(5)}$ |
| 11 | $C = P(1) \times P(2)^{P(3)} \times P(4) \times P(5) \times P(6)$ |
| 12 | $C = P(1) \times P(2) \times P(3) \times P(4)$ |
| 13 | $C = P(1) \times P(2) \times P(3) / P(4)$ |
| 14 | $C = P(1) \times P(2) \times P(3) \times P(4) \times P(5) \times P(6)$ |
| 15 | $C = P(1) \times (P(2) + P(3) + P(4) + P(5) + P(6))$ |
| 16 | $C = P(1) \times P(2) + P(3) \times P(4) + P(5) \times P(6)$ |
| 17 | $C = P(1) + P(2) \times P(3)) \times Q2$ |
| 18 | $C = P(1) + P(2) \times P(3)) \times P(4)$ |
| 19 | $C = P(1) + P(2) \times P(3)) \times P(4) \times P(5) \times P(6)$ |
| 20 | $C = P(1) + P(2) \times P(3)) \times P(4) \times P(5)^{P(6)}$ |
| 21 | $C = P(1) \times P(2) \times P(3)^{P(4)} \times P(5)^{P(6)}$ |
| 22 | C = P(1) / (P(2) + P(3) + P(4)) |
| 23 | C = P(1) + P(2) + P(3) + P(4) + P(5) + P(6) |
| 24 | $C = P(1) \times Q1^{P(2)}$ |
| 25 | $C = P(1) \times P(2)^{P(3)} \times Q1^{P(4)}$ |
| 26 | $C = P(1) \times P(2) \times P(3) \times Q1$ |

Table 10. Format for CER Data*

| Card Types | Input | Card Columns | Format |
|------------|---|--------------------------|------------|
| 14 | CER | 1-3 | A3 |
| 15 | <pre>Calculation type (F = factor, C = CBS element or subelement)</pre> | 6 | Al |
| | Factor CBS element number | 7-9 | 13 |
| | CBS subelement number (0 = a factor or no subelement, 1-6 = a subelement) | 10 | 11 |
| | CER number | 11-15 | 15 |
| | CBS element cross-reference number | 16-19 | 14 |
| | CBS subelement cross-reference number (0-no subelement, 1-6 = a subelement) | 20 | Il |
| | Factor identification (F = factor, blank = value) | 21 | Al |
| | Parameter P(1) (Factor number or value) | 22-30 | F9.0 |
| | Factor identification P(2) | 31 32-40 | Al F9.0 |
| | Factor identification P(3) | 41 42-50 | Al F9.0 |
| | Factor identification P(4) | 51 5 2- 60 | Al F9.0 |
| | Factor identification P(5) | 61 62 - 70 | Al F9.0 |
| | Factor identification P(6) | 71 72-80 | Al F9.0 |
| 16 | ECER | 1-4 | A4 |
| 17 | \$END | 1-4 | A4 |

^{*} $\overline{\text{CFR}}$ must precede the CER data to indicate that CER cost data will follow.

Calculation type - A CER can calculate either a factor to be used as a parameter in a succeeding CER or the cost of a CBS element (or subelement). A factor is designated by an "F"; a cost is designated by a "C".

Factor or CBS element number specifies either the factor or the line item in the CBS. The factor number is not related to any CBS element. It does not have to be the same as the number of a CBS element for which it is later used as a parameter.

CBS subelement number - A CBS line item can be broken down into a subelement, each of which is costed separately. Up to six subelements are allowed for each CBS element. A subelement cost is indicated by the numbers "1" through "6". Subelements can be costed in any order. The costs for each subelement are added to whatever cost is in the computer storage location for the CBS element. The subelement costs are added to any throughput cost previously entered for the CBS element. A "0" in this field initializes the computer storage location to zero. This is used only when no throughput costs have been entered for this CBS element, and there are no subelements. CER number - The number of the CER from Table 9 that is to be used in the calculation of this factor or cost.

CBS element cross-reference number is the identification of a previously costed CBS element. It is entered as "0", except when CER 8 is specified. CER 8 costs a CBS element as a function (e.g., percent) of a previously costed CBS element. CBS subelement cross-reference number can be used as a cross-reference. This field identifies the previously costed subelement. A "0" is entered if the reference is to the total cost of a CBS element.

Parameters P(1-6) can be either a value to be used directly in the CER or the number of a factor whose value is to be used in the CER. A factor is identified by entering "F" in the first column of the parameter field. A blank in the first column indicates that the remainder of the field contains a value to be used directly in the CER. Some CERs do not require six parameters. If a parameter is not required, the field should be left blank.

ECER indicates the end of CER data for a particular equipment. \$END signals the end of cost data input for all equipments.

Guidelines

- 1. The maximum number of CER data cards is 150 per equipment element.
- 2. Card type 15 is repeated until all CER cost data have been entered. Factors and CBS element costs are calculated according to the input sequence of card type 15's. The sequence is at the user's option, with the following two exceptions:
 - a. A factor card must precede any CER cards in which that factor is used as a parameter.

- b. A CBS element card must precede any CER cards in which a cross-reference is made to that cost.
- 3. The CER forms can be adapted by setting some of the parameters equal to 1 or 0. For example, if the CER form, CER = $P(1) \times P(2)$, is desired, CER 12 can be used by setting P(3) and P(4) equal to one. If the CER form CER = P(1) + P(2) + P(3) is desired, CER 23 can be used by setting P(4), P(5), and P(6) equal to zero.
- 4. Costs estimated by CERs can be added to a throughput cost.

An example of inputting CER data is given below. It is for estimating mission hardware production cost for the propulsion section of a missile. The cummulative average unit cost (in thousands of dollars) of 1000 motors (CAC (1000)) is estimated by the CER:

$$CAC(1000) = 0.066 \times I^{0.42}$$

where I is the total impulse in lb/sec

The total production cost could be estimated using the learning curve theory by the CER:

$$CTC = CAC(1000) \times Q^{1+b}/1000^{b}$$

where

CTC = Cummulative total cost

Q = Production quantity

b = learning-curve exponent

If I = 10,000 lb/sec, Q = 2000, and b = 0.152, then CTC = \$5688K. To input these as CER data, CER No. 10 from Table 9 is chosen for CAC(1000) and labeled FACTOR 1.

CER No. 10
$$C = P(1) \times P(2)^{P(3)} \times P(4)^{P(5)}$$

where

P(1) = 0.066

P(2) = 10,000

P(3) = 0.42

P(4) = 1.

P(5) = 1.

FACTOR $1 = 0.066 \times 10,000^{0.42} \times 1.1$

FACTOR 1 = 8.16K

For the CTC, CER No. 2 would be the best choice.

CER No. 2 C = P(1) x $Q2^{P(2)}/P(3)^{P(4)}$

where

P(1) = FACTOR 1

P(2) = 0.848

P(3) = 1000.

P(4) = 0.152

CTC = FACTOR 1 x $2000^{0.848}$ x $1000^{0.152}$

CTC = \$5688K

Q2 would be internally set to the calculated production quantity (2000).

OUTPUT CONTROL

The major cost output from SAFSCAM consists of four sets of charts. The user selects which cost output charts are to be printed by the output control card. All cost calculations for these four sets of charts are performed and stored regardless of the output control card. Setting the chart control equal to zero causes the particular chart to be printed. Any other number will suppress the printing (see Table 11).

SHIP INSTALLATION SCHEDULE

The ship installation schedule gives by ship class, the number of ships per year, or which equipment will be installed. It provides the fleet composite to be used in computing the total operational and investment quantities over all ship classes for each equipment element. The maximum number of installation years is 12. Installation can be spread over less than 12 years by leaving the appropriate fields blank. An example is given in Table 12, and the format is given in Table 13.

Table 11. Format for CER Data

| Card Type | Input | Card Columns | Format |
|-----------|---|--------------|--------|
| 18 | Equipment LCC (fleet summary) Chart 5 print control (0 = print chart) | 1-3 | 13 |
| | Unit ship LCC by equipment Chart 6 print control (0 = print chart) | 4-6 | 13 |
| | Ship LCC summary Chart 7 print control (0 = print chart) | 7-9 | 13 |
| | LCC by budget appropriation Chart 8 print control (0 = print chart) | 10-12 | 13 |
| | Cost level print control (0 = print complete CBS) | 13-15 | 13 |

Table 12. Ship Installation Schedule

| Ship Classes | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------|------|------|------|------|------|------|
| DD-963 | 0 | 0 | 1 | 0 | 0 | 0 |
| CGN | 0 | 0 | 0 | 0 | 0 | 2 |

Guidelines

- 1. Card type 21 is entered for each ship class.
- 2. The first six characters of each ship class name must be left-justified and identical to those in the equipment elements per ship section of input. Identification is made from the unique first six characters of the ship class name.
- 3. The order in which the ship classes are entered does not have to correspond to the order in the Equipment Elements per Ship section.

Table 13. Format for Ship Installation Schedule*

| Card Types | Input | Card Columns | Format |
|------------|---|--------------|---------------|
| 19 | Comment card | 1-80 | 8 V 10 |
| 20 | NOYRS | 1-5 | 15 |
| 21 | Ship class name - left- justified | 1-16 | A6, 4 X |
| | Number of ships outfitted in the first year | 11-15 | 15 |
| | Number of ships outfitted in the twelfth year | 66-70 | 15 |

^{*} Comment card allows the user to insert a comment concerning the input data. Its purpose is to separate the ship installation data from the CER data for quick proof checking. NOYRS defines the number of years over which the installation schedule will cover.

UNIT FLYAWAY DATA

The last section of ship level input is the unit flyaway data. It consists of a listing of the CBS element numbers whose costs are to be summed for the unit flyaway costs. Flyaway costs as defined in DOD Instruction 5000.28 are those cost elements that are related to the production of a usable end item of military hardware. Since the number and the arrangement of elements in the CBS can vary to meet user requirements, the numbers of the CBS elements to be included in unit flyaway costs must be provided as input (see Table 14).

Table 14. Format for Unit Flyaway Data

| Card Types | Input | Card Columns | Format |
|------------|--|--------------|--------|
| 22 | Comment card | 1-80 | 8A10 |
| 23 | Number of CBS elements Included in unit flyaway costs | 1-5 | 15 |
| 24 | CBS element number | 1-5 | 15 |
| | CBS element number | 6-10 | 15 |
| | CBS element number | 11-15 | 15 |
| | CBS element number | 16-20 | 15 |
| | CBS element number | 21-25 | 15 |
| | CBS element number | 26-30 | 15 |
| | CBS element number | 31-35 | 15 |
| | CBS element number | 36-40 | 15 |
| | CBS element number | 41-45 | 15 |
| | CBS element number | 46-50 | 15 |
| , | CBS element number | 51-55 | 15 |
| | CBS element number | 56-60 | 15 |
| | CBS element number | 61-65 | 15 |
| | CBS element number | 66-70 | 15 |
| | CBS element number | 71-75 | 15 |
| | CBS element number | 76-80 | 15 |

Card type 25 is repeated until the list of CBS element numbers is complete.

FOOTNOTES

The final section of input to SAFSCAM is the 10 footnote cards. The user has the option of adding footnotes to the first three major output charts. If no footnotes are desired, these cards are left blank (see Table 15).

Table 15. Format for Footnotes

| Card Types | Input | Card Columns | Format |
|------------|--------|--------------|--------|
| 25 | FNOTES | 1-80 | 8A10 |
| 26 | FNOTES | 1-40 | 4A10 |

Card types 25 and 26 are input in pairs allowing for five footnotes and 120 characters per footnote.

TUTTUO

One of the prime objectives of SAFSCAM is to display cost data in a logical, traceable, and useful format. The program produces eight output sections to accomplish this task as follows.

- 1. Secondary Output
 - a. Input data file
 - b. Reformatted listing of the input file
 - (1) CBS
 - (2) Equipment elements cost data
 - (3) Ship installation schedule
 - (4) Equipment elements per ship
 - (5) CBS elements included in unit flyaway costs
 - c. CER evaluation by equipment element
 - d. Equipment quantities fleet summary
- 2. Primary Cost Charts
 - a. Equipment element LCC fleet summary
 - b. Unit ship costs by equipment element
 - c. Ship class cost summary
 - d. LCC by budget appropriations

Appendix C is a computer listing of a sample run illustrating the secondary output and the four primary cost output charts.

INPUT DATA FILE AND REFORMATTED LISTING

The first output of SAFSCAM is a listing of the input data file in card image form. This listing is used in checking and locating input errors. The reformatted input listing is next and may be used to check whether the program is decoding the data properly. Its main purpose, however, is to provide the input data in an organized and labeled manner so that it may be used as traceable backup for the cost items in final output charts. The ship installation schedule, equipment elements per ship chart, and the next two sections of the reformatted listing present a good summary of the elements of the system being costed. Both charts are in a format suitable for publication.

CER EVALUATION BY EQUIPMENT ELEMENT

The second secon

The output in this section gives the user the immediate values of all calculations performed in the evaluation of the CERs. The left section of the page lists for each input the CBS element number or factor and the value of all parameters (Pl...P6) that make up the CER (TEMP). A factor must be calculated prior to the evaluation of the CER in which it is used. The value of the factor is then shown as a parameter in its proper CER. The right section of the page displays the SUBELS array. If a particular CBS element is composed of several CERs, each CER is stored in SUBEL 1 through SUBEL 6. A throughout cost would be stored in SUBEL 7. The total cost is found in SUBEL 8 and is incremented each time a subelement is stored in the array. For a factor, no data is stored in SUBEL 1-8, but the value of the factor is found under the FACTOR column.

EQUIPMENT QUANTITIES--FLEET SUMMARY

Fleet operational and investment quantities for each equipment element are given in this section. The quantities are generated from the ship installation schedule and the equipment elements per ship. For each equipment element, the quantity per ship is multiplied by the number of ships in the class. This procedure is repeated for each ship class and then summed over all ship classes.

EQUIPMENT ELEMENT LCC--FLEET SUMMARY

LCCs are calculated for each equipment element using the fleet operational and investment quantities. These cost estimates from the SUBEL arrays are presented in Figure 7. It is the first of the four primary output charts. Up to 10 columns can be printed on a page. If there is only one column left to be printed on the next page, SAFSCAM will print nine columns of the one page and two on the next page. This rule also applies to the next two charts as shown in Figures 8 and 9.

FSCAM LESTOASE

19.15.26.

1014A 1779-2-5 1779-2-5 1779-2-5 1779-2-5 1779-2-5 1779-2-5 1871-3 187-3 185-3 HISSILF 1729.68 121.50 121.50 121.50 121.60 13.00 10.00 259.45 18.23 27.62 27.62 27.62 LOJIPHENT ELEMENT LIFE CYCLE COSTS
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Figure 7. Equipment Element LCCs

09/08/78 19.15.2f.

SAFSCAM SAMPLE TESTOASE

A SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT FLEWENT LIFE CYCLF CSTS - 51 SHIP FLEET FLASE FHASE (FY77 44)

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| , . | | | 30.0 | 00.6 | 50. |

A Ship Class -- Unit Ship Costs Equipment Element Figure 8.

UNIT SHIP COSTS BY EQUIPMENT ELEMENT

This set of charts (Figure 8) presents LCCs by equipment elements for one ship in a particular ship class. The cost for each equipment element is determined by multiplying the unit cost of equipment by the quantity of that equipment on one ship in the class. It is assumed that all ships in a class will have the same operational and investment quantities. There is an output chart for each ship class.

SHIP CLASS COST SUMMARY

This chart (Figure 9) gives the total cost over all equipment elements for each ship class and the fleet LCCs. LCC for each ship are calculated by multiplying the total column from the previous set of charts (Figure 8) by the number of ships in that class from the Ship Installation Schedule.

LCCs BY BUDGET APPROPRIATIONS

The budget appropriation chart (Figure 10) gives costs by ship class, equipment element, contractor versus government, and budget appropriations. LCCs from Figure 8 are separated according to those four criteria. For each ship class, the costs in each category are multiplied by the number of ships in the class.

SPIP CLASS FOST SWHMARY
LIFE CYCLE CCSTS - 51 SHIP FLEET
R OT T 1 PHASE
LEVIT FH)

| TOTAL | | 2046.17 | 1779.24 | 121.50 | 201,87 | 1402,52 | 4.98 | 00.0 | 33.07 | 15.33 | 266.49 | 14.23 | 30.29 | 211.13 | 1.26 | 2.30 |
|--------------|---|-------------|------------|--------------------|-------------------|-------------------|------------------|-----------------------|----------|-------------------|------------|---------------------|--------------------|--------------------|----------|-------------------|
| La. | | 58.77 | 51.10 | 3, 10 | 6.46 | 39, 32 | | 00.0 | 06. | .71 | 7.67 | • 50 | 46. | 5.96 | 72. | |
| ٥ | | 63,69 | 55.38 | 3,7.9 | 6.30 | 41.63 | .16 | 00*0 | 1.03 | 64. | 4° 41 | ٠٤٠ | 56. | 6.57 | .23 | .07 |
| C. | | 416.00 | 360.00 | 24.55 | 40°04 | 283,58 | 1.06 | 0.00 | 6.6 | 3,16 | 24.00 | ¥9 e4 | 6.1€ | 4.2.70 | 1.6 | ۲۹. |
| c | | 923.54 | A0 4, 0.8 | 54.75 | 91.41 | 632,60 | 2.17 | 0.03 | 14.30 | 7.74 | 126.46 | A. 21 | 13,71 | 95.24 | 4.29 | 1.35 |
| • | | 586.17 | 509.71 | 35.12 | 56.71 | 40 3.46 | 46. | J, | 9. 5t. | 3. 14 | 76.46 | 5.27 | 9.61 | 0.6.66 | 2.02 | 69. |
| COST ILLMENT | | POTEL PHASE | CONTRACTOR | SYSTEM/PLOGRAM MGT | SYSTEMS INGTALING | TEST MAROHARE FRE | 3E V:LOF464T TR: | INDUSTRIAL FACTLITIES | JATA | SUPPORT LANTONENT | COVERUMENT | SYST-MZPKOC 844 MST | ONINTERIOR DESIGNS | 7, VELOF 1: 4; TLC |)ATA | INSHET OF LADGORS |
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Figure 9. Ship Class Cost Summary

MAF CAM

19,15,26.

LIFE CVCLE COSTS 3Y PUORET AFPROPOIATION
3Y LJULDHENT ELEMENT WIFITIN SHIP CLASS
61 SHIP FLEET
(FY77 §4)

| \$1,952 \$6,552 \$6,000 \$7,552 \$6,000 \$6,000 \$7,552 \$6,000 \$6,000 \$7,553 \$7,554 \$7,553 \$7,554 | | ₹01 € | FPCC | HCH | ** | Z. | 545 TOT |
|--|--|---------------|-----------|----------|----------------|----------|--------------|
| \$\\ \text{4.7} \psi \\ \text{5.5} \\ \text{5.5} \\ \text{5.5} \\ \text{5.000} \\ \text{6.000} | FIRST SALING | | | | | | |
| \$\\ \text{4.7} \\ \text{5.55} \\ \text{5.56} \\ \text{5.000} \\ \text{5.56} \\ \text{5.000} \\ | CHAIRACTOR | 9 7 9 | 11 053 | | | | |
| 4,741 36,552 0,000 0,000 4,536 4,741 36,506 0,000 0,000 4,536 4,741 36,506 0,000 0,000 1136,450 1136,470 1136,4 | The State of the S | | | 000. | 00.00 | 000.00 | 10.07 |
| 4.741 %6.5C4 0.000 0.000 1356.450 1356. | | 54. | 2.532 | 0.000 | 0.00 | 36.0 | |
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| 514134 F7.423 da.100 3.700 f.300 7.772 7.531 6.000 0.000 1150.430 54.472 66.121 6.000 0.000 1150.430 1.000 1150.430 2.000 0.100 9.300 2.000 0.100 9.300 2.000 0.100 9.300 | SHIP CLASS TOTAL | | | | | | |
| 7.572 7.573 6.000 0.000 1150.830 0.000 0.000 1150.830 0.000 0.000 1150.830 0.000 0.000 1150.830 0.000 | 1 | | | | | | |
| 7,772 7,531 6,000 0,000 115C,330 5,430 6,200 0,300 1,5C,330 1,5C,330 1,5C,330 1,3C,330 1,3C,3 | | 51.14 | F 7. 920 | 0000 | | | |
| 1779-274 1795-411 3.000 C.000 115C.889 | 1: 357.437 | 7.17 | 7.4.71 | | | 200. | 104.974 |
| 1779,274 1795,413 0.000 0.000 1150,030 0.000 0.0 | T -1 At (C+) | - N | | 3000 | 000.0 | 1150.430 | 1166.133 |
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Figure 10. LCCs by Budget Appropriation

APPENDIX A

DESCRIPTION AND LISTING OF SAFSCAM SUBROUTINES

This appendix is a brief description and listing of the subroutines and functions that make up SAFSCAM. Figure A-1 shows the relationship of the routines.

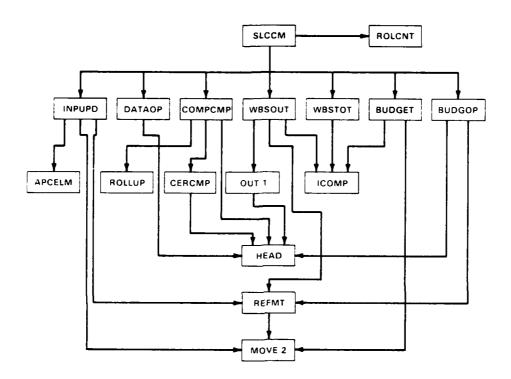


Figure A-1. Relationship of Routines

SLCCM is the main program that directs and controls all the operations. It calls all the primary subroutines as indicated in Figure A-1.

INPUPD reads and lists the input stream. It also sets up and initializes mass storage files for later use. The input is temporarily stored on a mass storage file.

DATAOP proofprints and reformats the input stream and stores it back on mass storage files. DATAOP also prints the reformatted backup cost data.

COMPCMP computes the LCC per equipment independent of ship class for all units of any class and stores the data on mass storage files.

CERCOMP decodes the proper CER forms and computes the CBS element cost and stores them in the row array.

WBSOUT sets up the cost data and formats for printing in OUTl.

WBSTOT computes the equipment element cost totals for each ship. This routine is only called when the unit ship costs by equipment element chart is not used, but the equipment element cost totals are needed for other charts.

ROLCNT is called when ROLLUP control is selected and new line counts are needed for printing.

BUDGET divides the costs for each equipment on each ship class into budget appropriation codes and government or contractor costs.

BUDGOP sets up the budget cost data for printing.

APCELM sets up the IWORD array for printing. The IMORD array contains the appropriation code, CBS number, and the cost element names.

ROLLUP executes the ROLLUP procedure for automatically summing the CBS row entries.

OUT1 directs the output printing for the first three primary cost charts.

MOVE 2 is a machine language (COMPASS) routine that is used to move characters of input words into two specific locations of another word. It is used in decoding and testing input words.

HEAD is used to print the title and data on each page of output.

REFMT is used to reformat and shift data.

ICOMP is a function used to determine the position of a given equipment element in an array of ships and equipments.

```
FTN 4.6++33
                                                                                                                                            67/31/79 23.53.41
                                        74/74
                                                  0F1=2
                              PROGRAP SECCE (INPUT=192,OUTPUT=96.,TAPE5=INPUT,TAPE6=CUTPUT,
                                                                                                                                                SECCH
                                                                                                                                                                    3
                                                       TAPE2=256, TAPE3=256, TAPE4=256, TAPE7=1408, TAPE3=384, TAPE9=256, TAPE11=256, TAPE11=1216)
                                                                                                                                                SLCCF
                                                                                                                                                SLCCF
                                                                                                                                                SLCCH
                                                                                                                                                SICCH
                       **** SAFSCAM = SYSTEM FORCE STRUCTURE COST ANALYSIS MODEL ****
                                                                                                                                                SLCCF
                                                                                                                                                SLCCM
                   SAFSCAH WAS HAITTEN IN 1975 BY CARL SINKBEIL, COMPUTER SCIENCE CORPORATION, HUNTSVILLE, AL.(2 5-837-7200) UNDER CONTRACT COAAHOI-75-L-9907 FOR THE ARMY HISSILE CUPHAND, RECSTORE ARSENAL CAL, TO PROVIDE A LIFE LYCLE COST MCDOL FOR THE ARMY SHOWACS-CROLAND MISSILE SYSTEM. THIS HODEL, KNOWN AS THE RULAND SYSTEM
                                                                                                                                                SLEEM
                                                                                                                                                SICCH
                                                                                                                                                SECCE
                                                                                                                                                                  11
                                                                                                                                                SICCH
                    C LIFE CYCLE COST MOGLE (SLOCM) WAS OFERATED ON A COC 7600 UNCER
                                                                                                                                                SLCCM
                                                                                                                                                                  14
                    C SCOPE 2.1.
                                                                                                                                                SECCH
                                                                                                                                                                  15
                   SLOCH WAS CHOSEN BY ALAN GLAZMAN, NSMC/UL (N-30) IN NOV, 1976
C FOR MODIFICATION AND EXECUTION ON A COC 6700 UNDER SCOPE 3.4 TO CO
C SIMILAR FOUNLLING FOR THE NAVY SIRCS (SHIPBORAD INTERMECIATE
C RANGE COMBAT SYSTLM). AFTER MAJOR MODIFICATIONS UNDER THE
C SUPERVISION OF THE LATE OR. BARBARA BELL, SLOCM WAS CHANGED TO
                                                                                                                                                SLUCH
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                                                                                                                                                SLCCM
                                                                                                                                                                  16
                                                                                                                                                SLLCM
                                                                                                                                                SECCH
                                                                                                                                                                  20
                                                                                                                                                SLCCM
26
                                                                                                                                                SECCH
                                                                                                                                                                  22
                                                                                                                                                SICCE
                                                                                                                                                                  23
                            MODEL CHANGES WERE MADE BY THE FOLLOWING FERSONS:
                                                                                                                                                SECCH
                                                                                                                                                SLCCH
                                                                                                                                                                  25
                               CONNIE MUNDY NSHC/DL(K-71) AV249-7463 NOV 76 - MAF 77 MIKE FAEFINKIS NSHC/DL(K-74) AV249-7852 APR 77 - JAN 78 CAROLYN NLLSUN NSHC/DL(N-30) AV249-8575 FEB 78 - AUC 79
25
                                                                                                                                                SLCCM
                                                                                                                                                                  26
                                                                                                                                                SLCCM
                                                                                                                                                SLCCH
                                                                                                                                                SICCH
                                                                                                                                                                  29
30
                       ·SYST
                                                                                                                                               SYST
                                                         - NAME OF THE SYSTEM
                                NHSYS
                                                        - TOTAL NUMBER OF SHIPCLASSES CONSICERED - NAME OF THE SHIFCLASS IN TMG MCROS
                                NOSLA
                                                                                                                                                SAST
                                NMSUEL , )
                                                                                                                                                SYST
35
                                NOCCHF( )
                                                         - INDEX NUMBER FOR F CUIPMENTS (CCFFCNENTS)
                                                                                                                                                SYST
                                                            INDEX NUMBER FOR F COLFMENTS (COPPENENTS)
(RUNNING TOTAL FOR EQUIPMENTS)
NAMES OF EQUIPMENT (2 MCNOS) FOR TITLES
IN MESOUT (INDEXED BY ECUIPMENT NUMBER
AND SHIPCLASS NUMBER)
NAMES OF EQUIPMENT (2 MORDS, 7 CHARS EACH)
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                                                                                                                                                                   4
                                                                                                                                                SYST
                                NMCCMF( , , )
                                                                                                                                                SYST
                                                                                                                                                SYST
                                                                                                                                                                  12
                               NAMESCE . )
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                                                                                                                                                                  13
                                                            FOR EQUIPMENT QUANTITIES TABLE - FLEET
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                                                            SUMMARY
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                                                                                                                                                SYST
                                                         - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIFTLASS (BEING PROCESSED)
                                                                                                                                                                  16
                               SHIFNE
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                                                                                                                                                SYST
                                                                                                                                                                  18
                                                                                                                                                SYST
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                              COMMON / NAMES
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                                                                                                                                                                  25
                                APPRCE 1
                                                                                                                                                1272
                                                                                                                                                                  26
                                SPCL( , )
                                                         - PERCENTAGES FOR CBS ELEMENT COST SPLITS
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                                                                                                                                                SIST
                                                        - COUNT OF THE LIFE CYCLE PHASES
- FIRST CBS SLEMENT NUMBER OF EACH PHASE
- UBS SLEMENT NUMBER FOR FAGE BREAKS
55
                                NPH
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                                                                                                                                                                  28
                                IPH( )
                                                                                                                                                SYST
                                                                                                                                                                  29
                                IPB( )
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u7/31/79 23.53.41
        PROGRAM SECON
                                    74/74 CF1=2
                                                                                                FT# 4.2+433
                                                   (LAST CBS NUMBER FOR THE FACE)

TITLES OF CBS PHASES

FILLT (SYSTEM) SIZE

LOHEST COST RLEMANT LEVEL TO BE PRINTED

(LOHEST LEVEL TO BE FOLLED LE HITHIN PHASE)
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33
                             IPHASE ( , )
                                                                                                                               SIST
                   C
C
 60
                             FLEETZ
                             NROLL ( )
                                                                                                                               SYST
                                                                                                                                                34
                                                   - TOTAL HOTSE COST
- TOTAL INVESTMENT COST MINUS TOTAL RIPOUT
- TOTAL RIFOUT COST
- MISSILE POTAE COST
- MUNDER OF CBS ELEMENTS TO BE INCLUDED IN
                             RDTOT
                                                                                                                                                36
37
                             TOTINV
                                                                                                                               SYST
                   0000000
                             SMISEL
                                                                                                                               SIST
                                                                                                                                               39
                             NOFLY
                                                                                                                               1272
                                                                                                                                               40
                                                      FLYAHAY COSTS
                             IFLYRCH ( )
                                                   - CBS FLEMENT NUMBER FOR FLYAMAY COSTS
                                                                                                                               SYST
                                                                                                                                               42
                                                   - USS CLEMFOR NUMBER FOR FLYAMAT CUSTS
- NUMBER OF YEARS IN SHIP INSTALLATION TABLE
- YEARS COVERED BY THE SHIP INSTALLATION TABLE
- HUMBER OF YEARS IN SHIP INSTALLATION TABLE
- FCCTNOTES FOR FIRST THE MAJOR OUTPUT CHARTS
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  76
                  C
                             TYFARS
                                                                                                                               SIST
                                                                                                                                               44
                             IYRS
                                                                                                                               SYST
                  C
                                                                                                                                               46
                                                                                                                               SYST
                             FNOTES ( . )
                                                                                                                               SYST
 75
                                                                                                                                               48
                           COMMON / MISC / NAP. APPRO17), SFCL(3,6,2), NPM, IPH(4), IFE(3),
                                                                                                                               SYST
                                                                                                                                               49
                                         IFHASE(2,4), FLEET Z. NROLL (4) , ROTOT, TOTINY, TOTRIP,
                                                                                                                               SYST
                                                                                                                                               50
                                         SMISRO, NOFLY, IFLY FOH (25), NOYES, IYEARS (12), IYES,
                                                                                                                               SYST
                                         FNOTES (5. 12)
                                                                                                                               SIST
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53
                            INTEGER APPRO, SPOL, FLEETZ
                                                                                                                               SYSI
                                                                                                                                               54
                                                                                                                               NPLT
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  45
                   C VARIOUS OTHER ARRAYS ARE EQUIVALENCED TO THE "ARRAY" AFRAY AS IN: C
                                                                                                                               NPL 1
                                              = ARAY(1,1)
                   C
                      - SECCH & ROH
                                                                                                                               KPUT
                       - BUDGET : CG = ARAY(1,2)
- INPUPC : IOKEC = ARAY(1,1)
- CCHPCFF: RCH = ARAY(1,1)
                   C
                                                                                                                               NPLT
 91
                                                                                                                               NELT
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                       - APCELM : IRAY = ARAY(1,1)
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                   C
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                                                   / ARAY(150,2)
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                   C
                                                                                                                               NEUT
                                                                                                                                               14
 95
                                                                                                                               M52
                     ******* HS (LENGTH AND COUNTER) COMMON ***********
                                                                                                                               MS2
                                                                                                                               PS2
                                                                                                                               MS 2
                                                   - MASS STORAGE UNITS COMMON RECORD LENGTH
(TYFICALLY 150)
- NUMBER OF ELEMENTS IN THE GOS (MAX 150)
- NUMBER OF EQUIPMENTS IN THE EQUIPMENT
ELEMENTS TABLE
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1 (
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                             ICCTR
                                                                                                                               PS 2
                                                   - 1153 MOROS) NECORD LENGTH OF 7 ARRAYS
IN THE "CERVLS" COMMON
                             L 15 a
                                                                                                                               PSZ
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                                                                                                                               P52
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                                                   - (910 NORDS) RECORD LENGTH OF 2 ARRAYS IN THE "CERVLS" COMPON
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17
110
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                                                                                                                               rs à
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                     ******** CSTAB (EQUIPHENT QUANTITIES) COMMON ************
                                                                                                                               CSTAR
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| | С | | (Q2) (mEAL) | | CSIAE | 8 |
| 12: | | TABLE | - SINGLY-DIMENSION | D ARRAY WHOSE MEMBERS ARE | CZIAL | 9 |
| | С | | A SERIES OF : | | CSTAB | 10 |
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| | Ç | | | INTITY OF EQUIPMENT FOR FACH | CSTAE | 12 |
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| | С | | | | SHIFIAS | 29 |
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| | C | ; | | | | 'FACTOR' OR 'C | LR'. | (150 HCRDS) | CEFVLS | 15 |
| 236 | ĺ. | ; | IFOWI | : | - | CBS ELEMENT NU | HBEP TO | WEICH THIS CER APPLIES | CERVLS | 16 |
| | C | ; | | | | (150 HORCS) | | | CERVLS | 17 |
| | | : | IAGO | | - | CER CONTILOL FL | AGS (O T | HRU 6) FOR ACOITIVE | CERVLS | 15 |
| | C | : | | | | CERS OR SUBELE | MENTS. 0 | INDICATES NG ADDING. | CEHVLS | 19 |
| | C | ; | | | | 1 THRU 6 INDIC | ATE ACD | UP SUBEL EMENTS. | CERVLS | 20 |
| 5 JE | C | ; | | | | (150 WORES) | | | CEFVLS | 21 |
| | C | ; | ICERNO | : | - | FLFERENCE NUMB | ER FOR C | ER EQUATIONS IN TH- | CERVLS | 22 |
| | C | : | | | | 'CERCUMP' SUBF | OUTINE. | (150 WORCS) | CHAVES | 23 |
| | C | | IXREF | VO. | - | CBS ELEMENT NU | MBER ULE | O IN CROSS REFERENCING | CEHVLS | ĉ 4 |
| | C | ; | | | | A PREVIOUSLY C | OPPU 1EO | CBS ELEMENT. AT PRESEN | T CEAVES | 25 |
| 216 | t. | ; | | | | CNLY CER EQUAT | | BER 8 ALLCHS CROSS | CERVLS | 26 |
| | | | | | | nt FER LNG ING. | 0 INCIC | ATES NO CROSS-REF. | CtrVLS | 27 |
| | C | | | | | (150 HORES) | | | CEAVLS | 28 |
| | C | | IXREF | :0 | • | | | GROSS-REFERENCING | CEFVES | 29 |
| | C | | | | | CES 209-FEEREN | | | CLAVES | Zu |
| 215 | C | | IFSTOR | | | | _ | TERS. (900 WORES) | CERVES | 31 |
| | C | | PSSTOR | _ | | | - | MCTERS. (930 WCKGS) | CE*VLS | 32 |
| | (| | ICEF |) | • | | | RRAY CONTAINING A | CENVLS | 23 |
| | Ç | | | | | | CATA TR | IPLETS WHOSE MEMBERS | CEFVLS | 34 |
| | Q | | | _ | _ | AREL | | | CFFAFZ | 35 |
| 5 21 | C | | TCE | | | LOUIPHENT NAME | | | CENVLS | 36 |
| | O. | | * ** | ETC | | Thirt w 500 2255 | CT61 4:55 | UNIT A THOUS | CERVLS | 27 |
| | C | | 101 6 | (2,4 | | | | UNIT 8. INDEX | CENVLS | 38 |
| | C | | | ETC | , | | | ENTS 8Y 9 (1,16,19, | CERVES | 39 |
| 1 26 | C | | | | | | OMING DA | TA RECOPOS ARE | CERVLS | 46 |
| 2.25 | 0 | | | | | INDEXED | _ | THEFFUR | CEHVLS | 41 |
| | 0 | | | | | 1 CIPCT | 6 | IXEEFNO | CENVLS | 42 |
| | Ċ | | | | | 2 IFORC | 7 | IXREFAD | CENVLS | 4.3 |
| | e, | • | | | | 3 INOMIC | 8 | IFST Cat | CERVLS | 44 |

```
37/31/79 23.53.41
         PROGRAM SLCCM
                                        74/74
                                                   0FT=2
                                                                                                           FTN 4.6+433
                                                                        IADL
                                                                                                  FSST CRE
                                                                                                                                               CENVLS
23.
                                                                        ICERNO
                                                                                                                                               CEFVLS
                                                                                                                                                                 46
47
                                                         - INDEX FCH MASS STORAGE UNIT 2 AND 3.
INDEX BEGINS AT 18 AND INCREMENTS BY 2
(14.21.22.21C) AND IS ICENTICAL TO THE
THIRD MEMBER OF DATA TRIPLET STOREC IN
                     Č
                                                                                                                                               CENVLS
                                    ICEF (3,6,9
                                                                                                                                               CERVES
                                                                                                                                               CENVLS
                                                                                                                                                                 50
                                                         THIRD MEMBER OF DATA TRIPLET STOREC IN THE IHEC AHRAY.

SUBELS IS A CROSS-HATCHED ARRAY HHICH IS RELATED CHE-TO-CHE TO THE CBS.

IT IS USED LCCALLY HITHIN 'COMPCHE' AND 'CERCOMP' FOF INTERIN STORAGE OF UP TO SIX SUBLEMENTS, I THEUFUT, AND I TOTAL VALUE FOR EACH CBS FLEMENT.

A FACTOF IS A PRECURSOR OF CNE CR MCRECEPS.
                                                                                                                                               CERVLS
235
                                                                                                                                              CERVLS
CERVLS
                                                                                                                                                                 52
                                 SUBELS( , )
                                                                                                                                                                 53
                                                                                                                                                                 55
                                                                                                                                               CERVLS
2 40
                                                                                                                                               CEFVES
                                                                                                                                                                 56
                                                                                                                                               CERVLS
                                 FACTOR( )
                                                                                                                                               CERVLS
                                                             CERS.
                                                                                                                                               CEFVLS
                                                                                                                                                                 59
                                                                                                                                               CEFVLS
                                                                                                                                               CERVES
                               COMMON /CERVLS/ CERCT, IFORC(150), IRONIU(150), IADD(150), ICERNC(150), IXREFNO(150), IXREFAD(150), IFSTORE(6,150), PSSTORE(6,150), ICER(200),
                                                                                                                                               CHAVLS
                                                                                                                                                                 €2
                                                                                                                                               CERVLS
                                                                                                                                               CERVLS
                                                          SUBELS (8, 150), FACTORS (154)
                                                                                                                                               CERVLS
                                                                                                                                                                 65
                                                                                                                                               CERVLS
256
                               INTEGER CERCT
                                                                                                                                               CERVLS
                                                                                                                                                                 €7
                     C **************** FOFACL COMMEN *****************
                                                                                                                                               CENVLS
                                                                                                                                                                 £ά
                                                                                                                                               CHAFTS
                                                                                                                                                                 €9
                                                                                                                                                                  3
                     255
                                                                                                                                               CHARTS
                                                                                                                                               CHA+TS
                                                                                                                                               CHAFTS
                     C
                                CHRICAT CONTAINS THE MAJOR OUTPUT CHART CONTROLS
                                                                                                                                               CHAFTS
                                                         - GENERATE CHART
                                                                                                                                               CHARTS
                                                        - NO GENERATION OF CHART
                                                                                                                                               CHAFTS
                                                                                                                                               CHAFTS
                     C
                                                                                                                                               CHAFTS
                                CHRICAT (1)
                                                          - IF EQUAL TO 0 - CALLS WESOUT(1) FOR EQUIPMENT
                                                            ELEMENT LIFE CYCLE COSTS - FLEET SUPMARY IF EQUAL TO U - CALLS MESCUTIZ) FOR UNIT SHIP COSTS BY EQUIFMENT ELEMENT
                                                                                                                                               CHAFTS
                                CHRICHT (2)
                                                                                                                                               CHAFTS
                                                                                                                                                                 12
265
                                                                                                                                               CHAFTS
                                                                                                                                                                 13
                                                         - IF NE. TO U - CALLS HESTOT BECAUSE
HBSOUT(2) HAS NOT CALLED
- IF EQUAL TO C - CALLS MESOUT(3) FOR SHIF
CLASS SUMMARY
                     C
                                                                                                                                               CHARTS
                                                                                                                                               CHASTS
                                                                                                                                                                 15
                                CHRICHT (3)
                                                                                                                                               CHARTS
                                                                                                                                                                 17
                                                                                                                                               CHA FTS
                                                          - IF EGUAL TO C - CALLS BLOGOF FOR LIFE
CYCLE COSTS BY BUGGET APPROPRIATIONS
- IF NE. TC J - CALLS RCLCNT FUR CUTFUT BY
                                CHRICKT (4)
271
                     C
                                                                                                                                               CHAFTS
                                                                                                                                                                 10
                                                                                                                                               CHAFTS
                                                                                                                                                                 19
                                                         - IF NE. TC J -
                                CHRICKT (5)
                                                                                                                                               CHAFTS
                                                                                                                                               CHAFTS
                                                                                                                                                                21
                                                            IF EQUAL TO U + LISTS THE SUBELS AFRAY FOR ENTIFE CBS FOR PROOFING
                                CHRICKI (6)
                                                                                                                                               CHAITS
279
                                                                                                                                               CHAFTS
                                                                                                                                               CHARTS
                                                                                                                                                                24
25
                                                                                                                                               CHA FTS
                               COMMON / CHAFTS / CHRTCHT(15)
INTEGER CHRTCHT
                                                                                                                                               CHESTS
                                                                                                                                               CHAFTS
                                                                                                                                                                 27
2 4(
                                                                                                                                               SILCE
                     C ROW ARRAY IS EQUIVALENCED TO THE "ARRAY" ARRAY AND USEC AS A COLUMN TO C - READ EBS COMPONENT UNIT COSTS FROM MASS STOPAGE UNIT 3.
C - COMPUTE TOTAL FLEET EBS UNIT COSTS AND WRITE THEM ON MS UNIT 13.
                                                                                                                                                                 40
                                                                                                                                              SLCCM
                                                                                                                                                                41
                                                                                                                                                                 43
2 45
                               DIMENSION HOW(1)
                                                                                                                                               SLCCK
                                                                                                                                                                 44
```

```
07/31/79 23.53.41
                                                                               FTN 4.6++33
       FROUNAM SLCCH
                            74/74 OF 1=2
                                                                                                          SLCCM
               C
                       FOUTVALENCE ( ROW, ARAY(1,1) )
                                                                                                                        46
                                                                                                          SLCCM
                                                                                                                        47
                    INITIALIZE "HEAD" SUBROUTINE.
                                                                                                          SLCCF
               C
                                                                                                                        46
                    MEAD! SUBBUUTINE LAUSES A NEW PAGE AND PUTS TITLE AND SYSTEM NAME AT TOF OF THE MEM PAGE.
2aj
                                                                                                          SICCH
                                                                                                                        50
                                                                                                          SLCCM
               С
                                                                                                                        51
               č
                                                                                                          SLCCH
                       CALL HEAD1
                                                                                                          SLCCE
                                                                                                                        53
                                                                                                          SECCH
2 QF
                Ç
                                                                                                                        54
                 CALL "INFUPO" SUBROUTINE TO: - DEFINE CONTANTS
                                                                                                                       56
57
                                                                                                          SLCCH
                                                                                                          SLCCF
                       - INITIALIZE INOLX, LENGTH AND COUNTER VARIABLES
3 .
                       - SET-LE AND INITIALIZE RECORD SPACES ON MASS STORAGE UNITS
                                                                                                          SLUCE
                                                                                                                        59
                       2, 3, 4, 9, AND 10 - READ IN THE UNTILE MANU STOFF IT FIECE-MEAL ON THE AFFROPRIATE MS UNIT. INFUT STREAM CONSISTS OF
                                                                                                          SECCE
                £.
                                                                                                                        ŧ۵
                                                                                                          SECCH
                                                                                                                        €2
                C
                                                                                                          SECCH
                                                                                                                        €3
                                          - SHIP LEVEL INPUT
- COST BREAKDOWN STRUCTURE (CB3)
- BUDGET AFPROPRIATION CODE BY CBS NU.
- UNIT FLYAMAY DATA
- SHIP INSTALLATION SCHEDULE
                                                                                                          SLCCM
305
               C
                                                                                                          SLCCF
                                                                                                                        65
               C
                                                                                                          SLCCF
                                                                                                                        t6
                                                                                                          SLCCE
                                                                                                          SLCCM
                                           - EQUIPMENT LEVEL INFUT

- EQUIPMENT PER SHIP CLASS

- EQUIPMENT COST DATA
21:
                                                                                                          SLCCK
                                                                                                                        €9
                                                                                                          SLCCM
                                                                                                                        71
                                                        - THROUGHPUT COST
- CER DATA
                                                                                                          SLCCM
               C
                                                                                                                        72
315
                                                                                                          SLCCF
                SLCCM
                                                                                                                        75
                                                                                                          SLLCM
                                                                                                                        77
               C
                                                                                                          SLCCM
                                                                                                                        78
                320
                 INITIALIZE TOTAL KOTEL AGGREGATE COST, TOTAL INVESTMENT AGGREGATE COSTS AND TOTAL AGGREGATE RIF-OUT COSTS FOR DETERMINING HBS FOR 1 PRIME AD 1 NAVY.
                                                                                                          SLCCH
                                                                                                                        60
                                                                                                          SLCCF
                                                                                                                        81
                                                                                                          SLCCM
                       RDTOT = 0.
TOTINV = 0.
                                                                                                          SECCH
                                                                                                                        23
325
                                                                                                          SECCH
                                                                                                                        ٤4
                                                                                                          SECCH
                                                                                                                        t5
                       SMISKO = J.
                                                                                                          SLCCF
               C
                                                                                                          SLCCH
                                                                                                                       £7
               C COMPUTE THE SHIP CLASS SUMS OVER ALL INFUT YEARS C (COUNT THE NUMBERS OF UNIT SHIFS FOR EACH SHIP CLASS-SUBSYSTEM C FOR EACH YEAR IN THE SHIP INSTALLATION TABLE)
                                                                                                          SECLM
                                                                                                                        ŧ6
                                                                                                          SLLCH
                                                                                                          SLCCM
                                                                                                                        c:
                                                                                                          SLCCM
                       DO 10 I=1, NOSUB
                                                                                                          SLCLM
                                                                                                                        52
                       SHIPSUP(I) = 0
                                                                                                          SECOM
                                                                                                                        93
                       DO 10 11=2,7
SHIPSUP(I) = SHIPSUM(I) + SINSTB(I,I1)
3 76
                                                                                                          SLCCE
                                                                                                          SLUCH
40012
                                                                                                                        95
                   14 CONTINUE
                                                                                                                        46
                                                                                                          SLCCH
                       COMPUTE THE FLEET SIZE
                                                                                                          SLCCF
                                                                                                                       98
346
               C
                                                                                                          SECCH
                                                                                                                       99
                                                                                                          SLCCF
                       FLEETZ = J
                                                                                                                      114
                       00 11 II=1, NOSUB
                                                                                                          SLCCF
```

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L7/31/75 23.53.41
                                                                                       FTH 4.E+433
                                 14/14 OFT=2
       FROGRAM SLCCM
                         FLEETZ = FLEETZ + SHIPSUM(II)
                                                                                                                   SLCCM
                                                                                                                                 112
                                                                                                                    SLCCH
                                                                                                                                 143
                     11 CONTINUE
                                                                                                                   SICCH
345
                                                                                                                                 164
                 C CALL "DATACP" TO PROCE-PRINT THE INPUT DATA STREAM
                                                                                                                                 165
                 C READ AND STEREL ON MASS STORAGE UNITS BY "INPUPO".
                                                                                                                    SLCCF
                                                                                                                                 1 (6
                                                                                                                    SLCCM
                                                                                                                                 167
                                                                                                                    SICCH
                                                                                                                                 160
                         CALL DATAOR
350
                                                                                                                    SLCLM
                                                                                                                                 149
                 C
                                                                                                                    SLCCM
                                                                                                                                 110
                                                                                                                    SLCCM
                 C
                                                                                                                                 111
                                     CUMPUTE WBS AND 185
                                                                                                                                 112
                 Č
                                                                                                                   SLCCF
                                                                                                                                 113
                         NCER = 1
                                                                                                                   SLCCH
355
                                                                                                                                 11-
                         NCT = IR=C(1) * 3
                                                                                                                    SLCCM
                                                                                                                                 115
                                                                                                                   SECCH
SECCH
                                                                                                                                 116
                                                                                                                                 117
                 C DO-LOOP 45 = MASTER LOUP TO COMPUTE UNIT COSTS
                               FOR EACH EQUIPMENT ACKOSS COST BREAKDOWN STALCTURE
361
                                                                                                                   SLCCM
                                                                                                                                 119
                         00 45 I1=1, ICCTK
                                                                                                                   SLCCM
                                                                                                                                 120
                         19 = 11
                                                                                                                    SLCCH
                         EQUI = ICEm(NCEK)
QCMPT(II) = 0
                                                                                                                   SLCCH
                                                                                                                                 122
                                                                                                                                 123
                         OCHPT2 (I1) = 0.
                                                                                                                    SLCCM
365
                                                                                                                    SLCCM
                                                                                                                                 125
                 C SUM QUANTITIES OF EQUIPMENT OVER ALL SHIP CLASSES
                                                                                                                   SECCH
                                                                                                                                 126
                                                                                                                    SECCH
                                                                                                                                 127
                         00 40 I=1,NCT,3
IBY3 = (I+2) / 3
                                                                                                                    SICCM
                                                                                                                                 120
370
                                                                                                                    SLLEH
                                                                                                                                 129
                         IFICSTABLE (I+1).NE.EGUI) GU TO 40
                                                                                                                    SECCH
                                                                                                                    SLCCH
                                                                                                                                 131
                 C FOF EACH "CCFF" FOUND IN "CSTABLE", MAKE CERTAIN THE SAME "COMF" C FOP EACH "EQUIF" FOUND IN THE "CSTABLE", MAKE CERTAIN THE SAME "EQUIF" C IS DEPLOYED ON A SHIP CLASS IN THE "SINSTB"
                                                                                                                    SICCE
                                                                                                                                 132
                                                                                                                   SECCE
                                                                                                                                 123
175
                                                                                                                   SLCCM
                                                                                                                                 124
                                                                                                                   SLCCM
                    DO 20 I3=1,NOSUB
IF ( CSTABLE(1) .EQ, SINSTR(I3,1) ) GO TO 30
20 CONTINUE
                                                                                                                                 136
                                                                                                                    SLCCM
                                                                                                                    SECCH
                                                                                                                                 137
                                                                                                                   SLUCH
                                                                                                                                 138
                                                                                                                    SLCCM
                                                                                                                                 1 39
                 C ERFOR MESSAGE - SHIP CLASS/"EQUIP" COMBO FROM "CSTABLE"
C FAILED PROOF TEST IN "SINSTE"
                                                                                                                   SLLCM
                                                                                                                                 146
                                                                                                                   SLCCM
                                                                                                                                 141
                     WRITE (6,21) CSTABLE(1)
STOP "(STABLE & SINSTE STIP CLASS NAMES OF NOT COPPARE"
21 FORMAT ( 1HJ, *SHIP *, A6, * IS NOT IN THE SHIP INSTALLATION*
1 * SCHEDULE*)
                                                                                                                    SLLCK
                                                                                                                   SECCH
                                                                                                                                 143
346
                                                                                                                   SLICE
                                                                                                                                 1 44
                                                                                                                    SLCCF
                                                                                                                                 145
                                                                                                                   SECCH
                                                                                                                                 146
                                                                                                                   SLCCF
                                                                                                                                 147
                 C SUM EQUIPMENT 'DEPLOYMENT' (O & S) QUANTITIES INTO THE "COPPT"
                                                                                                                                 148
                                                                                                                    SLLCH
                 C AFFAY (QQUAN & Q)
C SUM EQUIFMENT 'MANUFACTURE/INSTALL' (INVESTMENT) QUANTITES INTO
C THE "QCMFT2" AFRAY (QGUANZ & QZ)
396
                                                                                                                   SLCCM
                                                                                                                                 149
                                                                                                                   SLUCE
                                                                                                                                 154
                                                                                                                   SECCH
                                                                                                                                 152
                     30 CONTINUE
                                                                                                                   SLUCE
                                                                                                                                 1:3
                         OCMPT2(I1) = OCMP1(I1) + SHIPSUM(I3) + LSTABLE(I+2)
OCMPT2(I1) = OCMPT2(I1) + SHIPSUM(I3) + CSTABEL(IRY3)
395
                                                                                                                    SLUCK
                                                                                                                   SLCCF
                                                                                                                                 1 55
                     40 CONTINUE
                                                                                                                                156
                                                                                                                   SLUCH
                 C CALL "COMPEME" (AND "GEROMP") TO GET UNIT FOUIPMENT COSTS
                                                                                                                   SICCE
                                                                                                                                 158
```

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PROGRAM SLCCM
                                                                                                          ú//31/75 23.53.41
                               14/74
                                         UPT=2
                         FROM THUTS AND NEUTS (FACTORS & COST ESTIMATING RELATIONSHIPS).
                                                                                                            SILCE
436
                         AND IC FERFORP TIME-PHASING AS NECESSAFY.
                                                                                                                         1 60
                                                                                                            SLCCH
                                                                                                                         1 (1
                                                                                                                         1 (2
                                                                                                             SLUCH
                                                                                                            SLCCH
                                                                                                                         1 63
                       CALL CEMPENP (19, ILER(NCER+Z), ICER(NCER+1), OCMPT(11), GEMPT2(11))
465
                                                                                                            SLCCM
                                                                                                                         164
                                                                                                            SECCH
                                                                                                                         165
                                                                                                             SLCCH
                                                                                                                         116
                       NCER = NCER + 3
                                                                                                            SECCH
                                                                                                                         1 67
                    45 CONTINUE
                                                                                                            SLCCH
                                                                                                                         166
                                                                                                                         169
171
171
                                                                                                             SLCCM
410
                C SECOND CALL OF "DATAUP" SUBRTH FRINTS FOR EACH SHIP CLASS.
                                                                                                            SLCCE
                C THE UNIT SHIP DEFLOYMENT AND MFG/INSTALL EQUIPMENT QUARTITIES
                                                                                                            SLCCM
                                                                                                             SICCM
                                                                                                                         1 12
                                                                                                                         1 13
                                                                                                            SLCCF
                                                                                                            SLCCF
                                                                                                                         174
415
                C
                       CALL GATOP1
                                                                                                             SLLCF
                                                                                                                         1 75
                c
                                                                                                            SECCH
                                                                                                                         1 16
                   1 77
                                                                                                            SLCCM
                                                                                                                         178
426
                                    ORDER THE SHIP SUMMATICAS IN FROPER ORDER FOR PRINT
                                                                                                            SLLCM
                                                                                                                         179
                              USAGE AND SETUP STORAGE OF THE TOTAL NUMBER OF COMPONENTS
PER SHIP CLASS. THIS LAST OUTPUT IS STORED ON UNIT 10 TO BE
                Ċ
                                                                                                            SECCH
                                                                                                                         1 60
                              USED BY THE BUGGET ROUTINE.
                                                                                                            SLCCF
                                                                                                                         1 2 2
                                                                                                            SLUCK
                                                                                                                         163
                C
                        1 - 28MM = 1428MM
                                                                                                                         184
4.25
                        IPH2 = IFH(2)
                                                                                                            SLCCF
                                                                                                                         1 t 5
                                = IPH(NFH)
                                                                                                                         1 26
                        IPHL
                                                                                                            SLUCH
                        INC # 3
                                                                                                             SICLE
                                                                                                                         147
                        K = 4
                                                                                                            SICCH
                                                                                                                         1 68
                        KBY3 = K/3
                                                                                                            SECCE
                                                                                                                         169
436
                                                                                                            SLCCH
                C MAJOR DO-LCOF 49 TO READ EQUIPPENT UNIT COSTS FROM MS 3 INTO "ROW"
C MULTIPLY UNIT COSTS BY APPROPRIATE QUANTITY (Q OR Q2), AND
C PLACE RESULTS BACK IN "ROW" ARRAY & HRITE RESULTS ON PS UNIT 1G.
                                                                                                            SECCH
                                                                                                                         191
                                                                                                            SLCCM
                                                                                                             SLCCF
                                                                                                                         154
4 34
                                                                                                            SECOM
                C THIS DO-LOCP COMPUTES FOR EACH SHIF CLASS THE SUMMARY COST C OF EACH EQUIPMENT VS. CBS ELEMENTS
                                                                                                            SLCCF
                                                                                                                         156
                                                                                                            SECCH
                                                                                                                         197
                       00 49 ISU8S=1,NO SUB
                                                                                                            SECCH
                                                                                                                         158
                ¢
                                    SETUP UNITIN STORAGE INCEX
                                                                                                            SLCCY
                                                                                                                         215
                C
                                                                                                            SECCH
                                                                                                                         2.1
                       INDX10 = ICOMP(ISUES)
                                                                                                                         565
                c
                                                                                                            SLECK
                                                                                                                         203
                C SET UP BEGINNING AND ENDING INDIGES FOR CBS DATA READ FROM MS 3
                                                                                                                         264
445
                                                                                                            SLCCM
                                                                                                                         205
                                                                                                                        266
247
                       IBEG = INDX1\downarrow+3 + 1
                                                                                                            SLLCH
                       IENO = IEEG + (NOCJMP(ISUBS) - 1) * 3
                                                                                                            SLCCM
                                                                                                            SLCCH
                                                                                                                         2 [ 6
                ORDER SHIP SUMMATIONS AND ERROR CHECKI LOCK FOR FIRST APPEARANCE C OF SHIP CLASS NAME IN "SINSTA": IF FOUND, CONTINUE: IF NOT FOUND
                                                                                                            SLUCH
• 5 L
                                                                                                                         264
                                                                                                                         214
                C ABORT!
                                                                                                            SICCH
                       FOR ALL TRIPLETS (SHIP CLASS/EQUIPHENT/MS3 INDEX) STORED IN THE
                                                                                                            SICCH
                                                                                                                         212
                C "IREC" ARRAY, THE SHIP CLASS NAME WILL BE CONSTANT FOR ALL TRIPLETS C OF THIS "ISUO" SHIP CLASS RETWEEN "IBEG - 2" AND "IFNC"
                                                                                                                         213
                                                                                                            SICCE
455
                                                                                                            SLECH
                                                                                                            SLCCM
                                                                                                                         215
```

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14/74 GFT=2
                                                                                                           FTH 4.6+433
                                                                                                                                           07/31/79 25.53.41
         FROGRAM SLCCM
                               SHIPNM = IREC(IBEG-2)
                                                                                                                                               SLCCH
                                                                                                                                                               216
                               00 46 I1=1.NGSUB
IONE = I1
                                                                                                                                               SLCCM
                                                                                                                                                               217
                                                                                                                                               SLUCH
                                                                                                                                                                216
                                IF ( SFIFKM .EQ. SINSTB(I1.1) ) GC TO -7
                                                                                                                                               SECCH
                                                                                                                                                                219
400
                          46 CONTINUE
                                                                                                                                               SLCCM
                                                                                                                                                                224
                        HRITE (6.+65) ISUBS, SHIFHM, NUSER, IONE

+65 FORMAT (*1FOx SHIP CLASS*, I3, * - *, A7, * SEARCHING*, I3,

C *SUBSYSTEMS IN "SINSTE" AFRAY, "SECCH" STOPPEC *,

C *HITH SEARCH-LOOP IN(Ex*, I3, * BUT NO MATCH!*)
                                                                                                                                               SLCCM
                                                                                                                                                                221
                                                                                                                                               SLCCF
                                                                                                                                                                222
                                                                                                                                               SLLCH
                                                                                                                                                                223
                                                                                                                                               SLCCH
                                                                                                                                                                224
465
                               STOP "IN SLOCK DO-LOOF 461 SHIP NAME NOT FOUND IN SINSTE ARRAY"
                                                                                                                                               SLCCK
                                                                                                                                                                225
                          47 CONTINUE
                                                                                                                                               SLCCM
                                                                                                                                                                226
                               SHIPSH(ISUBS) = SHIPSUH(IONE)
                                                                                                                                               SLCCF
                                                                                                                                                                227
                                                                                                                                               SLCCF
                     C MULTIPLY UNIT COSTS OF THE SHIP'S EQUIPMENT BY THE SHIP EQUIP-
C MENT TABLE VALUES AND STORE ON MASS STURAGE UNIT 1)
                                                                                                                                                               229
230
47.
                                                                                                                                               SLCCH
                                                                                                                                               SLCCM
                                                                                                                                                                231
                     C THE VARIOUS "IF" TESTS BETHOLD HERE AND "49" ASSURE FROFER MULTIFLIERS SLOCK
C AND SUMMATIONS ACCOMOING TO THE NUMBER OF FRASE BREAKS IN THE "CBS" SLOCK
                                                                                                                                                                232
                                                                                                                                                                223
                     C AND SUMMATIONS ACCORDING TO THE NUMBER OF FFREE BREAKS IN THE COS.

C - EG) 1 PHASE = SIMPLE COS.

C - EG) 2 PHASES = ASMO (ROTEE, INVESTMENT)

C - EG) 1 PHASES = SIRUS (ROTEE, INVESTMENT, OAS)

C IN ANY EVENT, THE "TO BE HAMUFACTURED" QUANTITY IS USED FOR "ROTEE"

C AND "INVESTMENT" PHASES: THE "DEPLOYLO" QUANTITY IS USED FOR "ULS".
                                                                                                                                                                234
                                                                                                                                               SLCCH
                                                                                                                                                                235
                                                                                                                                               SLCCH
                                                                                                                                                               236
                                                                                                                                                                237
                                                                                                                                               SLCCM
                                                                                                                                                               230
                                                                                                                                               SLCCM
                                                                                                                                                                239
                                DO 46 J=18EG, IEND, INC
                                CALL REACHS ( 3, ROH, NHBS, IREC(J) )
                                                                                                                                               SLCCM
                                                                                                                                                               241
                                Q = CSTABLE (K)
                                                                                                                                               SLCCM
                                                                                                                                                                242
                                OZ = CSTABEL(KBY3)
                                                                                                                                                                243
                        02 = CSTABEL(KBYS)

K = K + 3

KBYS = K/3

00 475 I=1,NMBSM1

IF (NFN.EC.2) GU TU 474

IF (I.LT.IFHL) GO TO 474

FOM(I) = ROM(I) + 0

GO TC 475

474 ROM(I) = RCH(I) + 02

475 CONTINUE
                                                                                                                                                               244
                                                                                                                                               SLCCK
                                                                                                                                               SICCH
                                                                                                                                               SLCCH
                                                                                                                                                                246
                                                                                                                                               SLCCM
                                                                                                                                                                247
                                                                                                                                                                248
496
                                                                                                                                               SECCH
                                                                                                                                                                249
                                                                                                                                                               250
251
                                                                                                                                               SICCH
                                                                                                                                               SLCCM
                                                                                                                                               SICCM
                                                                                                                                                                252
                         475 CONTINUE
                          ROWINNES = KOH(1) + KOH(IFH2) + ROW(IPHL)

IF (IFH2.EQ.IPHL) ROW(NH8S) = RGW(NH8S) - ROW(IPHL)

GALL HRITPS ( 10, KOH, NH8S, INOX10 )

INOX10 = INOX16 + 1

48 CONTINUE
                                                                                                                                               SLCCH
                                                                                                                                                               253
495
                                                                                                                                                               254
                                                                                                                                               SLCCH
                                                                                                                                                               256
                                                                                                                                                               257
                                                                                                                                               SICCH
                          49 CONTINUE
                                                                                                                                                                258
5...
                                                                                                                                               SLCCF
                                                                                                                                                               259
                     C PRINT A CHART OF TOTAL EQUIPMENT COSTS VS. CBS ELEMENTS
                                                                                                                                               SLCCF
                                                                                                                                                               2 € 0
                          ACCORDING TO CHETCHT(1) INDICATOR (J=PRINT CHART)
                                                                                                                                               SICCE
                                                                                                                                                               2 6 2
                                IFICHRICAT(1). NE. U) GO TO 50
                                                                                                                                               SLCCH
                                                                                                                                                               2 t 3
565
                                                                                                                                               SLCCH
                                                                                                                                                               264
                     C CHRICHT(1) AND WBSOUT(1) CONTROL THE PRINTING AND C COMPUTATIONS FOR THE FIRST MAJOR OUTPUT CHART - C LIFE CYCLL COSTS - FLEET SUMMARY
                                                                                                                                               SLLCF
                                                                                                                                                               2 65
                                                                                                                                               SICCE
                                                                                                                                                               5 66
                                                                                                                                               SICCH
                                                                                                                                               SLCCK
                                                                                                                                                               2 (8
                                                                                                                                                               269
                                                                                                                                               SLCCM
516
                                CALL WESOUT(1)
                                                                                                                                                               210
                                                                                                                                                               271
                                                                                                                                               SLCCM
                        SLUCK
```

```
27/31/79 23.53.41
      FREGRAM SLECK
                          7+/74 OF F=2
                                                                        FTN 4.6+433
                                                                                                SLCCM
                 50 CONTINUE
              С
                                                                                                SLCCM
                                                                                                           274
275
515
                               COMPUTE BUDGETARY COCE COSTS
                                                                                                SLCCH
                     00 55 I≈1,NUSU8
                                                                                                SLCCF
                                                                                                           2 77
                                                                                                           2 18
                     NCOME = NCCCMP(I)
                     NOUNT - PEONIC ---
DO 55 J#1,NCUMP
525
                                                                                                SLCCM
                                                                                                           2 & G
                                                                                                SLCCF
                                                                                                           2 (1
              C
                     CALL BLOGET ( I. J )
                                                                                                SLCCM
                                                                                                           2/3
              ć ****
                                                                                                SLCCF
525
                                                                                                           2 14
                 55 CONTINUE
                                                                                                SICCH
                                                                                                SLCCK
                                                                                                           216
                CHECK CHRTCHT(5) TO SEE IF OUTPUT BY ROLL-UP NIMBER IS REQUISTED. IF YES THEN CALL RCICNT TO GLT THE COST ELEMENT COUNT AND VALUES FOR OUTPUT OF THE COUNT AND VALUES FOR OUTPUT (YES)
                                                                                                SLCCH
                                                                                                           2 27
                                                                                                SLCCF
536
                                                                                                SLCCM
                                                                                                           2 (4
                                                                                                SLCCH
                                                                                                           250
                                                                                                SECCH
              C
                                                                                                SLCCF
                                                                                                           252
                    SLCCH
                                                                                                           253
                                                                                                SLCCE
5 35
                                                                                                SLCCF
                                                                                                           2 15
              C CHECK CHRTCAT(2) TO SEE IF UNIT SHIP COST BY EQUIPMENT
                                                                                                SLCCM
                                                                                                           296
              C IS REQUIREC. (SECOND MAJUR OUTPUT CHART)
C 0 - YES, 1 - NO
                                                                                                SLCCF
                                                                                                           256
                                                                                                SLCCK
                                                                                                           259
                     IF (CHRIGHT(2).EQ.a) GQ TO 70
                                                                                                STCCH
                                                                                                           341
              C IF CHRIGHT (2) . NE. J. HBSOUT (2) IS NCT CALLE (: FOWEVER,
                                                                                                SLCCK
                                                                                                           342
              C UNIT SHIP CALCULATIONS ARE NEECED THUS WOSTOT IS CALLED C TO PREFORM THE NECESSARY COMPUTATIONS.
545
                                                                                                SLUCH
                                                                                                           3 64
                                                                                                SLCCM
                                                                                                           305
                     CALL WESTOT
                                                                                                SLCCH
              c
                                                                                                SICCE
                                                                                                           3.7
              č ......
                                                                                                SLCCH
                                                                                                           308
5=(
                    GO TC 75
                                                                                                SLCCF
              C.
                                                                                                SLCCM
                                                                                                           314
              C CHRTCHT(2) AND HBSOUT(2) CONTROL THE PRINTING AND
                                                                                                SLCCM
                                                                                                           311
              C COMPUTATIONS FOR THE SECOND MAJOR CUTFUT CHART - C UNIT SHIF COST BY EQUIPMENT
                                                                                                SLCCM
                                                                                                SECCH
                                                                                                           313
                                                                                                SLCCF
555
                                                                                                           314
                 70 CONTINUE
                ************************
              c
                                                                                                SLCCF
                                                                                                           316
              С
                                                                                                SLCCH
                                                                                                           317
                     CALL WESOUT (2)
              C
551
                                                                                                SECCE
                                                                                                           319
                                                                                                SICCH
                                                                                                           324
              ¢
                                                                                                SLCCM
                 75 CONTINUE
                                                                                                SICCH
                                                                                                           323
565
                 TEST CHATCHT(3) TO SEE IF SHIP SUMMARY CHARTS ARE TO
                                                                                                SECCH
                        BL GENERATED
0 - YES, 1 - NO
                                                                                                SLCCM
                                                                                                           325
                                                                                                SLCCH
                                                                                                           326
                                                                                                SECCH
                     IF (CFF TCNT (3).NE. J) GO TO 80
                                                                                                SLCCM
                                                                                                           326
576
                                                                                                SLCCM
                                                                                                           329
```

| | PYCGRAM SLCCM 74/74 OFT=2 | FTN 4.E+433 | 47/21/75 | 23.53.41 |
|------|--|-------------------|----------|----------|
| | C CHRCNT(3) AND WOSQUT(3) CONTROL THE FR | INTING AUG | SLCCF | 330 |
| | C COMPUTATIONS FOR THE THIRD MAJOR OUTPU | T CHAFT - | SLCCM | 331 |
| | C SHIP CLASS COST SUHMARY | | SLLLM | 332 |
| | C ++++++++++++++++++++++++++++++++++++ | ******* | SECCM | 333 |
| 575 | C | | SLCCM | 334 |
| | CALL WESGUT(3) | | SICCH | 3 3 5 |
| | C | | SLCCM | 336 |
| | • | ****** | SECOM | 3.27 |
| | C | | SLCCM | 338 |
| 5 3. | 80 CONTINLE | | SLCCM | 139 |
| | c | | SLCCH | 346 |
| | C TEST CHRTLNT(4) TO SEE IF BUDGETARY C | ODE COST CHART IS | SLCCM | 341 |
| | C TC de Generated | | S 100 M | 342 |
| | C 0 - YES, 1 - NO | | SLLCM | 343 |
| 5 45 | Ĺ | | SLCCM | 344 |
| | IF(CHRICHT(4).Nt.J) GC TO 60 | | SLCCH | 3 45 |
| | C ************************ | ******* | SLCCM | 346 |
| | С | | SECCH | 347 |
| | CALL BUCGOF | | SLCCM | 346 |
| 590 | Ç | | SICCH | 349 |
| | • | ******* | SLCCM | 350 |
| | 68 CONTINCE | | SLCCH | 351 |
| | END | | SLCCM | 352 |

```
14/74
                                                                                                                    07/31/79 23.53.41
  SCENDUTINE BUDGET
                                           0FT=2
                                                                                         FTN 4.0+433
                         SUBROUTING BUDGET ( IS. IC )
                                                                                                                       ellGET
                                                                                                                       SYST
                   SYST
                                                                                                                        SYST
                                               - HAME OF THE SYSTEM
                c
                          NMSYS
                                               - TOTAL NUMBER OF SHIPCLASSES CONSIDERED
- NAME OF THE SHIPCLASS IN THE WORDS
- INJEX NUMBER FOR EQUIPMENTS (COMPONENTS)
                          NOSUB
                          NMSUB( , )
                                                                                                                        SAST
                                                                                                                        SIST
                          NOCCHE ( )
                ſ.
                          (RUNNING TOTAL FOR EQUIPMENTS)

NMCCHF( , , ) - NAMES OF EQUIPMENT (2 MOLES) FOR TITLES

IN MBSOUT (INDEXEC BY EQUIPMENT NUMBER
                                                                                                                        SYST
                                                                                                                        5751
1'
                                                                                                                        SIST
                                                                                                                                       11
                                                  AND SHIPCLASS NUMBER!
                                               - NAMES OF EQUIPMENT (2 MORDS, 7 CHARS EACH)
FOR EQUIPMENT QUANTITIES TABLE - FLEET
                                                                                                                       SYST
                          NAMESL ( , )
15
                                                  SUMMARY
                                               - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIPCLASS (BEING PROCESSED)
                          EQUI
                                                                                                                        SYST
                                                                                                                                       16
17
                                                                                                                        SYST
                c
                          SHIFNE
                                                                                                                        SYSI
                                                                                                                       SYST
                                               / NMSYS, NUSUB, NMSUB(2,43), NCCOMP(43),
2.
                         COMMEN / NAMES
                                                                                                                                       20
                                     NHCOMP(2, 143, 43), NAMESC (146, 2), EGUI, SHIFNH
                                                                                                                        SYST
                        SIST
                                                                                                                                       23
                                                                                                                        SYST
                                               - COUNT OF DIFFERENT APPROPRIATION COCES - APPROPRIATION CODE NAMES
                                                                                                                       5751
5151
25
                          NAP
                          APPROL )
                С
                                                                                                                                       ŹЬ
                          SPGL( , )
                                               - PERCENTAGES FOR CBS ELFPENT COST SPLITS
                                                                                                                        SYST
                                               - GUUNT OF THE LIFE CYCLE PHASES
- FIRST CBS LLEMENT NUMBER OF EACH PHASE
- CBS ELEMENT NUMBER FOR FAGE BREAKS
(LAST CBS NUMBER FOR THE PAGE)
- TITLES OF CBS PHASES
- FLEET (SYSTEM) SIZE
                          NPH
IPH( )
                                                                                                                        SYST
                С
                                                                                                                       SYST
                                                                                                                                       29
36
                          IFB( )
                                                                                                                                       31
                                                                                                                        SYST
                          IPHASE( , )
                                                                                                                       T2Y2
                          FLEETZ
                                                                                                                        SIST
                                                  LOWEST COST ELEMENT LEVEL TO BE PRINTED (LOWEST LEVEL TO BE ROLLED UP MITHIN PHASE)
                          NROLL ( )
                                                                                                                        SYST
                                                                                                                                       34
35
35
                С
                                                                                                                       SYST
                                               - TOTAL ROTTE COST

- TOTAL INVESTMENT COST MINUS TOTAL RIFOUT

- TOTAL RIFOUT COST
                          ROTET
                CCC
                          TOTINV
                                                                                                                       SYST
                                                                                                                                       37
                          TOTRIF
                                                                                                                        SYST
                                                  MISSILE FOTLE COST
                                                                                                                        SYST
                000
40
                          NUFLY
                                                  NUMBER OF CBS ELEMENTS TO BE INCLUCED IN FLYAWAY COSTS
                                                                                                                       SYST
                                                                                                                                       41
                          IFLYF(H( )
                                                  CHS ELEMENT NUMBER FOR FLYAWAY COSTS
                                                                                                                        5151
                          NOYRS
                                                 NUMBER OF YEARS IN SHIP INSTALLATION TABLE YEARS COVERED BY THE SHIP INSTALLATION TABLE
                                                                                                                       SYST
                          IYEARS
                                               - NUMBER OF YEARS IN SHIP INSTALLATION TABLE
                                                                                                                        SYSI
                                               PLUS ONE (COLUMNS FOR PRINTING SHIPPINST TABLE) - FECTIVITES FOR FIRST THE MAJER OLIFUT CHAFTS
                                                                                                                       SYST
                                                                                                                                       45
                          FNOTES( . )
                                                                                                                       SYST
                        COMMEN / MISC / NAP.AFPRC(7), SFCL(3, 6, 2), NPH, IPH(4), IFB(3), IPMASE(2, 4), FLEETZ, NROLL(4), PUTOT, TOTINY, FOTFIP,
                                                                                                                        1242
                                                                                                                                       49
50
                                                                                                                       SYST
                                      SMISKO, NOFLY, IFLYROW (25), NOVES, I'VE AFS (12), IYES,
                                                                                                                       SYST
                                                                                                                                      52
53
                                     FNGTES(5,12)
                         INTEGER AFPRO, SPIL, FLEETZ
                C
46
                         COMMON / BUDG / TOTO(7,2), TUTS(4,2,7), LENR9, IPROCUD(1251)
                                                                                                                       EUCC
                С
                                                                                                                       ecco
```

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SUEFUUTING BUDGET
                                 :4/14
                                           0F T=2
                                                                                         FTN 4. E+433
                                                                                                                   7/31/79 23.53.41
                    ******* MS (LENGTH AND COUNTER) COMMUN ************
                                                                                                                      MS2
                                                                                                                      MS2
 ĠΩ
                 C
                                                                                                                      MS2
                 000
                           LENA
                                                - MASS STORAGE UNITS COMMON RECORD LENGTH
                                                                                                                      MS2
                                                - MASS SIDEAGE UNITS COFFICE RECORD CLASTE (TYPICALLY 150)
- NUMBER OF ELEMENTS IN THE COS (MAX 150)
- NUMBER OF EQUIPMENTS IN THE EQUIPMENT ELEMENTS TABLE
- (150 MORES) RECORD LENGTH OF 7 ARRAYS
                           NWBS
                                                                                                                      MS 2
                 CCC
                           ICCTA
 66
                           L156
                                                                                                                      MS2
                                                                                                                                     11
                                                IN THE "CERVLS" COMMON

- (9)) HORCS) FECOND LENGTH OF 2 PRRAYS
IN THE "CERVLS" COMMON
                                                                                                                      MSZ
                          L936
                                                                                                                      MS 2
                                                                                                                      MSZ
                                                                                                                                     14
                 Ċ
                                                                                                                      MS2
 71
                                                                                                                                     15
                          COMMON / MSZ / LENK, NHOS, ICCTR, L150, L190
                                                                                                                      MS 2
                                                                                                                                     16
17
                                                                                                                      MS 2
                                                                                                                      MS 2
                                                                                                                                     15
                                                                                                                      rs 2
 15
                                                                                                                      NELT
                                                                                                                                      2
                 C ..... NPUT CCHMON ........
                                                                                                                      KELT
                                                                                                                      NPUT
                 C VARIOUS CTHER ARRAYS ARE EQUIVALENCED TO THE "ARAY" ARRAY AS IN:
                                                                                                                      AFL 1
                                                                                                                                      5
                                                                                                                      NFLT
                                                                                                                                      6
7
                 C
 ēί
                    - SLCCH I ROW
                                            = ARAY (1.1)
                                                                                                                      NEUT
                        BUDGET : CG
                                             = ARAY (1,2)
                                                                                                                      NEL 1
                                                                                                                                      8
                        INPUPC | IOKEC = ARAY(1,1)
COMPCEPT FOW = ARAY(1,1)
                 c
                                                                                                                      NPUT
                                                                                                                                     10
                        APCELP : IRAY = ARAY(1,1)
                 C
                                                                                                                      NELT
                                                                                                                                     11
                                                                                                                      NELT
                         COMMON / NPUT
                                                 / ARAY (150,2)
                                                                                                                      NPUT
                                                                                                                                     13
                 C
                                                                                                                      NFL 1
                                                                                                                                     14
                         OIMENSION APSAV(150,2), CG(1), COL(150)
                                                                                                                      BUCGET
                 c
                                                                                                                      BUCGET
                         EQUIVALENCE (ARAY(1,2),CG)
                                                                                                                      EUCCET
                 C
                                                                                                                      BULGET
                                                                                                                                     10
                         INTEGER CHAR, APS AV, CG, APINDX INTEGER FCALL
                                                                                                                      BUCGET
                                                                                                                                     11
                                                                                                                      BUCGET
                                                                                                                                     12
                 000000
                             AFINOX - INDEX ON FILE 3 FCR BEGINNING LOCATION FCR TEMPORARY STORAGE OF APSAV(1,1) - 1ST PART APPRO
APSAV(1,2) - 2ND PART APPRO
CG 1 = CONTRACTOR
2 = GOVERNMENT
 45
                                                                                                                      BUDGET
                                                                                                                                     14
15
                                                                                                                      EUCGET
                                                                                                                      EUCCET
                                                                                                                                     16
                                                                                                                      RUCGET
                                                                                                                                     17
                                                                                                                      BUCCET
                                                                                                                                     18
                         DATA AFINOX / 218 /
1.10
                                                                                                                      BUCGET
                                                                                                                                     19
                         DATA FCALL /3/
                                                                                                                     EULGET
                          IF (FCALL.EQ.1) GO TO 22J
                                                                                                                                     21
                          FCALL = 1
                                                                                                                      EUCCET
                         KK = 1
                                                                                                                     BUDGET
                                                                                                                                     23
135
                 6.
                             REAC AND STOKE APPRO AND GOV/CONT
                                                                                                                                     24
                         DO 260 I=1,5
CALL REACTS (3,AFAY, LENR, I)
                                                                                                                      eudget
                                                                                                                                     25
                                                                                                                     ELCGET
BLCGET
                                                                                                                                    26
27
                         NPR = LENR/5
DO 200 J=1,NFR
INOX = (I-1)*NFR+J
                                                                                                                     BUCGET
116
                                                                                                                                    29
30
                                                                                                                      EUCCET
                          IF (INEX.GT.NWBS) GO TO 210
                                                                                                                      eucget
                         INOEX = J*5-4
IFLAG = 1
                                                                                                                      elE(et
                                                                                                                     BUDGET
                                                                                                                                     32
                                                                                                                     ELCCET
                                                                                                                                    33
```

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SLERULTINE BUCGET
                                               14/74 OFT=2
                                                                                                                              FTN 4.6+433
                                                                                                                                                                   07/31/79 23,53.41
                             110
                                                                                                                                                                                             24
35
                                                                                                                                                                        ELEGET
                                                                                                                                                                        eucget
                                                                                                                                                                                             36
27
                                                                                                                                                                        ELCCET
                                                                                                                                                                                             38
29
                                                                                                                                                                        BLEGET
12.
                            11G CONTINCE

120 IF (K.EQ.II) GO TO 1+5

CALL M(VC (ARAY(INLEXI, II, EQUI, 1, K-11))

IF ( (K-II).GT.2) GO TO 13J

DO 125 L=1, NAP

CALL M(VC (APPRU(LI, 1, CHAR, 1, K-II))

IF (GHAI.NC.EQUI) GO TO 126

EQUI = AFFRO(L)

GO TO 141

126 IF (ECUI.RE.2PPR) GC TO 125

GO TO 141
                                                                                                                                                                        ELCGET
                                                                                                                                                                        EUCCET
                                                                                                                                                                        EUCGET
                                                                                                                                                                        ELCGET
                                                                                                                                                                        BUCGET
1.25
                                                                                                                                                                        BULCET
                                                                                                                                                                        PLEGET
                                                                                                                                                                                             46
47
                                                                                                                                                                        BUCGET
                                                                                                                                                                        EUCCET
                                                                                                                                                                                             46
139
                            GO TO 141
125 CONTINCE
                                                                                                                                                                       EUCCET
                                                                                                                                                                                             53
                            GO TC 145
                                                                                                                                                                        BUCGET
                                                                                                                                                                                             51
                                                                                                                                                                        EUG G E T
                                                                                                                                                                                             52
53
                                    OO 135 L=1,NAP

IF (AFFRC(L).EC.LQUI) GO TO 14G

IF(EQUI.NE.4HPROC) GO TO 135
                                                                                                                                                                        EUCCET
1 35
                                                                                                                                                                        ELCCET
                                                                                                                                                                       EUDGET
                                                                                                                                                                                            55
                            GO TO 141
135 CONTINUE
                                                                                                                                                                        EUCGET
                                                                                                                                                                       PLLGET
                                                                                                                                                                                            57
                            GO TO 145
140 APSAV(INGX, IFLAG) = L
                                                                                                                                                                        erc cet
                                                                                                                                                                                            58
140
                                                                                                                                                                       PUCGET
                                                                                                                                                                                            59
                            GO TO 142
141 APSAV(INOX, IFLAG) = 2
                                                                                                                                                                       BUCCET
                                                                                                                                                                                            €IJ
                                                                                                                                                                       BUCGET
                                                                                                                                                                                            £1
                            141 APSAV(INDX, IFLAG) = 2

142 CONTINUE

IF (IFLAG.EQ.2) GO TO 150

II = K+1

IFLAG = 2

GO TO 10 J
                                                                                                                                                                       ELCCET
145
                                                                                                                                                                       BUCGET
                                                                                                                                                                       BUC (ET
                                                                                                                                                                       BUCCET
                                                                                                                                                                                            €6
€7
                        145 APSAVINOX, IFLAG) = 3
C* GET GOV/CONT INGICATOR
150 CONTINUE
                                                                                                                                                                       ELCGET
15C
                                                                                                                                                                       EUDCET
                                                                                                                                                                                            69
                                    IFLAG = 1
K = u
                                                                                                                                                                                            70
71
72
73
                                                                                                                                                                       ELLGET
                                    K = U
INDEX = INDEX + 1
OO 17G L=1,3G
CALL MCVE (ARAY(INCEX),L,CHAR,1,1)
IF (CHAR.EQ.1H ) GU TO (17U,180), IFLAG
K = K+1
                                                                                                                                                                       BUGGET
ELEGET
155
                                                                                                                                                                       BUCGET
                                                                                                                                                                                            74
75
                                                                                                                                                                       EUCGET
ELDGET
                                                                                                                                                                                            76
77
                            K = K+1
IFLAG = 2
CALL M(VE (GHAK,1,EQUI,K,1)
IF (K.EQ.10) GU TO 180
170 CONTINUE
180 IF (EQUI,EQ.10HCUNTRACTOR) KK = 1
IF (FQ(LEQ.10HGUVERNPENT) KK = 2
CG(INDX) = KK
                                                                                                                                                                       ELLGET
16.
                                                                                                                                                                       EUDGET
                                                                                                                                                                                            79
                                                                                                                                                                       EUCCET
                                                                                                                                                                                            eo
                                                                                                                                                                       EUCGET
                                                                                                                                                                                            81
82
                                                                                                                                                                       ELCGET
                                                                                                                                                                       BUCGET
                                                                                                                                                                                            Ł 3
                            243 CONTINUE
165
                                                                                                                                                                       EUCCET
                                                                                                                                                                                           85
86
87
                                                                                                                                                                      BLCGET
BUC CET
                                    CALL HAITMS ( J. AFSAV(1,1), NWBS, AFINDX )
CALL HAITMS ( 3. APSAV(1,2), NWBS, APINDX+1 )
CALL MAITMS ( J. CG , NWBS, APINDX+2 )
GO TC 24-3
                                                                                                                                                                                           68
89
9
                                                                                                                                                                       RULCET
175
                        ٤.
                                                                                                                                                                       BUEGLT
```

```
SUB- JUIING BUDGET 14/74 Or 1=2
                                                                                                              FTH ++c++35
                                                                                                                                                 47/11/19 23-53-41
                                                                                                                                                    EUCGET
EULFET
                                                                                                                                                                       91
92
                         222 CONTINUE
                                CALL READMS ( 3, APSAV(1,1), NNBS, APIRDX )
CALL READMS ( 3, APSAV(1,2), NNBS, APIRCX+1 )
CALL READMS ( 1, CG ), NNES, APIRDX+2 )
                                                                                                                                                     BULLET
                                                                                                                                                                        53
171
                                                                                                                                                    BLC C+T
                                                                                                                                                                       ٠,
                         240 1 = IC(M+(IS)+IC-1
                                                                                                                                                                        45
                                                                                                                                                    EUDCLT
                                                                                                                                                     BLLEFT
                                                                                                                                                                       56
57
                                        SINCE THERE SO MANY CVS CONSTRATIONS, UNIT 9 WILE STOP, THE TOTO FOTALS USING AN INTEX GENERATED FROM CVS COMBINATION
                                                                                                                                                    FLICET
                                                                                                                                                     FLECET
                                                                                                                                                                        55
                                                                                                                                                     200651
                                                                                                                                                                       59
                         CALL ALACMS ( 12, LOL, NWBS, 1 )

KK = ...
                                                                                                                                                     ELE(ET
                                                                                                                                                                     1:1
                                                                                                                                                     RUC CET
                                                                                                                                                     3006ET
                                                                                                                                                     BULLET
                                                                                                                                                                     113
                                                                                                                                                     ELECET
                                 II = 1
                                                                                                                                                     RULGET
                                                                                                                                                                     115
                                00 3E0 J=1.4835
                                                                                                                                                    EUDGET
                                                                                                                                                                     1.6
1.7
                                                                                                                                                     ELECET
                         00 340 JJ=1,NPH
340 IPK = (J-IFH(JJ))*18K
IF (IEk+=0.J) KK = KK+1
                                                                                                                                                    EULGET
ELCCET
                                                                                                                                                                     110
                                                                                                                                                                     169
                         IF (IEk_20.3) KK = KK+1
L = CG(J)
K = AP\AV(J,1)
IF (K*-G.J) GO IJ IO
IF(K*-G.J) K = IFRCCUC(I)
COL J = CUL(J)
IF (J.-G.SPGL(I,1I) ) COLJ = CCL(J)*SPCL(2,II)/1}
35) TOTC(K.L) = TOTL(K,L) + COLJ
TOTS(KK_L,K) = TOTL(KK,L,K) + COLJ
TF (J*-L*SPCL(I,1I) ) GO TG 360
                                                                                                                                                    BULCET
                                                                                                                                                                     111
                                                                                                                                                    FLLGET
                                                                                                                                                                      112
                                                                                                                                                    BUDGET
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100
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EUCCET
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                                                                                                                                                     CUCCET
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                                                                                                                                                    EUEGET
                                                                                                                                                                     110
                                IF (J. L. SPCL(1.11) ) GO TO 3EC
K = AFSAV(J,2)
IF (K. E G. 2) K = IFRCLOD(I)
                                                                                                                                                     ELLCLT
                                                                                                                                                    BUCHLT
                                                                                                                                                                     120
                                                                                                                                                                     121
                                                                                                                                                     ELLGET
                                COLJ = CCL())*SPCL(3,II)/1.J.
II = Il + 1
GO TC 353
                                                                                                                                                    ELLGET
                                                                                                                                                    ILL (ET
                                                                                                                                                                     123
                                                                                                                                                    BUCGLT
                                                                                                                                                                     124
125
                         3E, CONTINUE
                                                                                                                                                    CLCC: T
                                                                                                                                                                     126
                                STURE TOTAL APRLY FOR THIS CVS COMBINATION OR UNIT 9 CALL HAITHS ( \tau_{\rm P} TOTA, LENF9, ( )
                                                                                                                                                                     127
                                                                                                                                                    éUGG:T
                                                                                                                                                    BULCET
                                FETURN
ĉ1
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                                ENE
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.1/31/73 23.53.41
   JUDE OUTING BUCGUE
                                     14/74 Or T=2
                                                                                                         FTN + + t+453
                                                                                                                                             EUCGOF
                             SUPPCULING BUDGUE
                             COMMON / 9006 / TOTE (7,2), TOTE (4,2,7), LEW 9, TERROCCE (125)
                                                                                                                                             BULE
                                                                                                                                             EUCG
MS2
                                                                                                                                                                 3
                      452
                                                                                                                                             MSE
                                                       - MASS STOLAGE UNITS COMMEN PLODEC LENGTH
                              LINA
                                                       - MASS STOP AGE ONLY COPYCH WESTER CEROTH
(TYPILALLY 15-)
- NUMBER OF CLUMENTS IN THE CB1 (MAX 15-)
- NUMBER OF COUFFERTS IN THE COUFFERT
(LIPKINTS TAPLE)
                                                                                                                                             MS.
MS2
                               NWBS
11
                               ICCIR
                                                                                                                                             MSZ
                                                        - (15, HORCS) FECCED LINGTH OF 7 AVEAYS
                              L 15 1
                                                        AN THE "CERVES" COMMON

- (9.1 MORLES) MEGGRE E NOTH OF 2 A FAYS
IN THE "CERVES" COMMON
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                              LciC
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                                                                                                                                              MSZ
                   Ċ
                                                                                                                                             P52
                                                                                                                                                                15
                             COMMON / MSZ / LLNK, NHUS, ILCTR, E150, E190
                                                                                                                                             MS2
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                                                                                                                                             MSZ
                   С
                                                                                                                                             MSE
                                                                                                                                                                16
19
                                                                                                                                             MS2
                      SYST
                                                                                                                                             TZYZ
                                                        - NAME OF THE SYSTEM
                                                       - HAME OF THE SYSTEM
- TOTAL NUMBER OF SHIPCLASSES CONSIDERED
- HAML OF THE SHIFCLASS IN THE HORDS
- INUEX NUMBER FOR EQUIPMENTS (COMPENHINS)
(HUNHING TOTAL FOR EQUIPMENTS)
- HAMES OF EQUIPMENT (2 HORDS) FOR TITLES
IN MOSQUIT (IMPRESSED BY EQUIPMENT NUMBER
                               NGSLB
                                                                                                                                             SYST
                                                                                                                                             SYST
                               NMSLE( . )
                               NOCEMPE 1
                                                                                                                                             SAST
                               NHCCHF( , , )
                                                                                                                                              SYST
                                                                                                                                             1 2 Y 2
                                                        AND SHIPCLASS NUMBER) - NAMES OF EQUIPMENT (2 HORDS, 7 GRAYS FACH)
                                                                                                                                             SYS1
                               NAMESLE . )
                                                                                                                                              2757
                                                           FUR EQUIFMENT QUANTITIES TABLE - FLEET
                                                                                                                                             SYST
                                                                                                                                                               14
15
                                                                                                                                             SYST
÷ 7,
                                                           SUMMARY
                                                        - PRESENT COULFMENT (EXING PROCESSED)
- PRESENT CHIPCLASS (B ING PROCESSED)
                               E D D T
                                                                                                                                             1242
1242
                               SHIFFF
                             SYST
SYST
                                                                                                                                             2 Y 2 T
                                                       - COUNT OF DIFFERENT APPROPRIATION CODES
- AFFRODENIATION CODE NAMES
- FINCENTAGES FOR CBS LEMENT COST SHELLS
- COUNT OF THE LIFE CYCLE FRASES
- FIRST COST LEMENT NUMBER OF RACE PHASE
- LOST LEMENT NUMBER FOR THE PAGE
- LOST COST PHASES
- FICET (SYSTEM) SIZE
- LOHEST COST (LEMEN) EFVEL TO BE PRINTED
- LOHEST COST (LEMEN) EFVEL TO BE PRINTED
- LOHEST CLYFE TO BE FOLLED UP WITHIN PHASE)
- TOTAL ROTER (OST)
- TOTAL INVESTMENT COST MINUS TOTAL RIFOUT
                                                       - COUNT OF DIFFEHENT APPROPRIATION CODES
                                                                                                                                                               25
26
                               NAP
                                                                                                                                             SYSI
                               APPRC ( )
                                                                                                                                             SYST
                               SPCL( , )
                                                                                                                                             5151
                                                                                                                                             545T
1242
                               NFH
                               IPH( )
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                                                                                                                                             2151
                                                                                                                                                                36
31
                                                                                                                                             SYST
                               IPHASE ( , )
                                                                                                                                              1242
                               FLEETZ
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                                                                                                                                             SYST
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25
                               NAOLL ( )
                               POTCE
                                                                                                                                             SYST
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17
                               TOTINV
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TUTH HULTING MULGUE
                                 . 4//4 OF T=2
                                                                                                   FTN 4.6++33
                                                                                                                                 17/11/75 25.55.91
                              TOTRIE
                                                     - TOTAL WIROUT LUST
                                                                                                                                    SYST
                                                                                                                                                     19
                              Sh1571
                                                     - MISSILE FUTA: CCST
- NUMBER OF GBS LLIMENTS TO BE INCLUDED IN
                                                                                                                                    1272
1272
                              NOFLY
                   С
                                                        FLYAHAY COSTS
                                                                                                                                    SYST
                                                     FLYAMAY COSTS

- GBS : LEM. NT NUMBER FOR FLYAMAY COSTS

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

- YLANG COVERED BY THE SHIP INSTALLATION TABLE

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

- FLUS ONE COCLUMNS FOR PETINING SHIFFINST TABLE)
                              IFLYF(H( )
                              NOYES
                   C
                              TYEARS
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                                                                                                                                                     44
                              TYPS
                                                                                                                                    SYST
                                                     - FOLTHOTES FOR FIRST THE MAJOR CLIFUT CHARTS
                                                                                                                                    TZYZ
                              FROTESE . )
                                                                                                                                                     47
                                                                                                                                    SYST
                                                                                                                                                     47
                             COMMEN / MISC / HAP, APPRU(7), SPCL(3, 6, 2), NPF, IFH(4), IFC(5),
                                           IFHASE (2,4), FLEET 7, ARCLL (4), RCTOT, TOTINV, TOTRIF,
                                                                                                                                     SYST
                                                                                                                                                     5 J
                                           SMISRU, NUFLY, IFLY HOW (25), NCYAS, IYL AF S (12), IYAS,
                                                                                                                                    SYST
                                           FHOTE $ (5 . 12)
                                                                                                                                    2121
                                                                                                                                    £Y$T
                             INTEGRA APPRO-SPOL FLEET?
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                      SHIFINS
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                   THE LEFT A MAY IS A SINGLY-SUBSCRIFTED ARRAY WHOSE FIRST POSITION C IS THE TOTAL NUMBER OF UNIQUE SHIPPLASS/LOUIPPENT COMEINATIONS. C THE NEXT THREE POSITIONS START A SERIES OF TRIPLETS WHOSE
                                                                                                                                    SHIFINS
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                                                                                                                                     SHIFINS
                      MEMBERS ARET SHIFCLASS RAME, FOUIFMENT RAME, MS 3 INCEX.

THE RUNNING SUM OF THE TOTAL NUMBER OF UNIQUE
                                                                                                                                    SHIFINS
                                                                                                                                    SHIFINS
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                                                        SHIFCLASS/EGUIFMENT COMMINATION IN THE
                                                                                                                                    SHIFINS
                                                         LOUIFMENT LEVEL INFUT
                                                                                                                                     LHI FINS
                                                     - TH_ NAME OF THE SHIP CLASS
                              IFEC(2.5.5)
                                                                                                                                    SHIFINS
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                                      11. TC)
                              IFEC(3,6,9
                                                      - THE NAME OF THE EQUIPMENT
                                                                                                                                     SHIFINS
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                                     12,ETC)
                                                                                                                                    SHIFINS
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                              IndC(4,7,13
                                                     - INDEX FOR MASS STURAGE UNIT 3. AN INTEGER
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 ...
                                                        NUMBER BLOTAKING A 18 AND INCREMENTING BY 2 TO FORM 18,20,22,24,2TC. THIS INCEX IS THE STARTING LOCATION OF A RECORD (LENGTH)
                                      13,£70)
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                                                         ON A UNIT SHIP (COMPLIED BY SUBFOUTINE
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                                                                                                                                    SAIGIHL
                                                         CUMPOMP).
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                   C
                                                                                                                                     CHIFINS
                             COMMON / MARGIAY / IREC (375 I)
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                      **** SHIFIFS (SHIP SUMMATION AND INSTALLATION TABLE) COMMON *****
                                                                                                                                     CHIFINS
                                                                                                                                                     ĉЬ
                                                                                                                                     CHIFINS
                                                    - CONTAINS THE TOTAL NUMBER OF UNIT SHIPS FOR LACH CHIP CLASS FOUND BY INSPECTION OF THE SHIP INSTALLATION TABLE.

THE SHIP DEFLOYER METATION TABLE TO SERVICE SHOULTABLE. FOR EACH SHIP CLASS NAME SINSTE(X,1) - SHIP CLASS NAME SINSTE(X,2-7) - THE YEARLY NUMBERS OF UNIT SHIPS OF THIS CLASS TO BE DEFLOYED YEAVEN SHALLED
                              SHIFSUM( )
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?1
                                                                                                                                    SHIFINS
1 °
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                              SINSTE( . )
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                                                                                                                                     CHIFINS
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114
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                                                      - THE TOTAL NUMBER OF URIT SHIPS FOR EACH SHIP CLASS. IT IS THE SAME COURT AS
                    r,
                              SHIFSM( )
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                                                         SHIFSUM, HOW VER, IT IS DEFINED IN A
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400000 ALTUUNILL
                                   14/24 OF T=2
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                                                          SPECIFIC ORDER AFTER REPORTERINGKING IN
SECONTS RESTOR CO-LOCES AMICH
SETE MING THE TOTAL LOSIS BY SHIP CLASS
111
                                                                                                                                        SAIFINS
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SHIFINS
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                                                                                                                                        SELFINS
                             COMMON / LHIFING / SHIFSUM(43), SINSTEC43.71, ONIFSM(43) INTECE- SHIPSUM, SINSTE, SHIFSM CIMENSION SYTCH(4.3), STOT(6.3), TOT(61,0MS(2),0MC(2))
                                                                                                                                                          46
12
                                                                                                                                        SHIFIRS
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                                                                                                                                        EUL (U+
                              CINENSION LETTED
                                                                                                                                        BUT CC+
                    C.
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                              INTEGER GGT
DATA GGT ZIJHLGHTWALTE , I HGGVERRMEHT, ILHTUTHE (C+G) Z
DATA IPLULZIH+Z, IGLAHKZIH Z, IZEROZIH Z, IHIHUSZIH-Z, ILHEZIHIZ
DATA IPLULZIH+Z, IGLAHKZIH Z, IZEROZIH Z, IHIHUSZIH-Z, ILHEZIHIZ
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BULCCF
12:
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                           1 SYIUT( .. K) = ..
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                             CALL HEAD INGS
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                              WPITE 16,161.1 IPLUS, FLEET Z
NCONF = NOCOMPIIS)
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                                                                                                                                        SUC CCF
                              CALL FIFT (NASUE(1, IS), NHS, 2, 1HL )
                                                                                                                                        EUCLOP
                             00 10 v=1.0
00 10 k=1.3
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27
                             00 1: **:.5

STOT(J,K) = J.,

00 1:6 I( = 1,hLOMP

1= I+1

IF ((MCC((IC-1),11)),h4,5) GD 10 20
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145
                              KARAK = IZLEU
IF (IC. 6T. 1) KARAK = ICHE
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                                                                                                                                        EUCCCF
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23
                         HEITE 16.1.JII KARAK, NMS, APPRO
2. CTOT = 3
                                                                                                                                        BULGUP
                                                                                                                                        968666
                              GTOT = S
                                                                                                                                        ROBBUS
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ı۶
                        BUCCCF
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37
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ELCCP
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1 +
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                                                                                                                                       EUL COP
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                                                                                                                                        EUCGUP
                                                                                                                                        AUD LUF
                             #7175 (#,1730) (6) (3),
70 60 J=1,7
70 60 K=1,2
STOT (J,K) = STOT (J,K) + TOTO(J,K)
STOT (E,1) = ((0) (J,1) + CTOT
STOT (M,2) = STOT (8,2) + GTOT
CONTINI-
                                                                                                                                       ELLGCP
BUCGGF
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                                                                                                                                       EULCOP
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401308
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57
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IF (MCCM=. EQ. 1) 60 FO 1(2)
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| ا ، الماد | CLITA EUCGOP | 14/74 OF1=2 | FTh 4.54453 | .7/31/73 | 23.53.41 |
|-----------|--------------|----------------------------------|------------------------|------------------|------------|
| | DÓ 1 u | 1 J=1.0 | | eul 604 | 53 |
| | | J,3) = STOT(J,1) + STOT(J,2) | | FLLTUF | 59 |
| | | (6.1050) | | EUCGCP | € |
| 1 75 | WEITE | (6.133)) (CGT (K), (STUT (J, K), | J=1,0),K=1,3) | EU£ (C ► | €1 |
| | 1. 2 CONTI | NLE | | ELLGCH | Ł2 |
| | LO 11 | 3 J=1.5 | | 5LL (OP | €3 |
| | DO 15 | 3 K=1,2 | | EUCCC F | £ 4 |
| | 133 SYIOT | (U,K) = 5YTOT (U,K) + STOT (U, | k) | ∃UL(0P | t5 |
| 14. | 15 CUNTI | NUE | | euc cop | £ t |
| | | TRUT SYSTEM TUTALS | | 4090UB | 67 |
| | 113 WFST6 | (6,104u) FuficTZ | | 81.000 | ٤٠ |
| | | i J=1,∂ | | ELL(CF | t 9 |
| | | (0,3) = 5YTOT(J,1) + SYTCT(J | | BUCGOP | 7ú |
| 1 ° | | (E, 1330) (CGT (K), (SYTCT (J,K) | , J= 1, ~) , K= 1, 3) | EUCGLF | 71 |
| | # [TUF | | | ELLUCF | 72 |
| | 130 - FO- 4A | TIA1,44x, *LIFE CYCLE COSTE o | | ACC COR | 73 |
| | 1 | 57X, *6Y EQUIFMENT ELEML | | EUCGOF | 74 |
| | 2 | €,X,I5,* SHIF | | EUCCUP | 75 |
| 1 % | 3 | 65X,* (FY79 | BH) */ | FLLGCH | 7€ |
| | | HL, ex, 122 (1H=)) | | 900000 | 77 |
| | 13.1 FOFMA | T (#1,6x,2415,3x,7(8x,A4),6x | | 200 c C F | 7 E |
| | 1 | 7X,24(1H-),2X,E(2X,1)(| 1H-))) | ECC CON | 79 |
| | | T (11X,#16,A9) | | ELEGEF | ٤٠ |
| 1 34 | | T (15X,A1u,6X,6F12,3) | | 90000UB | <i>r</i> 1 |
| | | T (1H-,6x,15,* SHIP FLEET TO | | BULCOF | t 2 |
| | | T (1He,1LX,*SHIP CLASS (OTAL) | • / 1.X.18(1+-)) | BILLOUP | £3 |
| | FNÛ | | | 800.006 | € 😘 |

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2//31//5 23.53.41
  ACTECUTING INFUED CHAZE OF L= 2
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                           SUB (CUTINE INFUFL
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                 SYST
                                                                                                                                 SYST
                                                                                                                                 5157
                                                   - NAME OF THE SYSTEM
                            NMSYS
                            NMSYS - NAME OF THE SYSTEM
HOSDY - TOTAL NUMBER OF SHIPPLASSES CONSIDERED
NMSUB(,) - HARE OF THE SHIPPLASSES IN THE HOSES
NCCCHE() - INDEX NUMBER FOR ECLIPMENTS (COMPONENTS)
(HUNNING TOTHE FOR EQUIPMENT)
NMCCCHE(,,) - NAMES OF GOULDMENT)
IN HESULT IIDEXED BY COULDMENT NUMBER
                                                                                                                                 SYLT
                                                                                                                                 3751
                                                                                                                                 1245
                                                                                                                                 5151
                                                                                                                                 SYST
                                                                                                                                 S\,Y \succeq T
                                                                                                                                 2721
5121
                                                      AND SHIPCLASS NUMBER
                                                   - MARCO OF LOUIFMENT (2 WORLS, 7 CHARS EACH)
FUE LOUIFMENT QUARTITIES TABLE - FLEET
                            NAMESCE , )
                                                                                                                                                  13
                                                                                                                                  LYST
                                                      SUMMARY
                                                                                                                                 1242
                                                                                                                                                  15
1:
                                                   - FESSINT EQUIFMENT (8 ING PROCESSED) - PELSENT SHIPCLASS (BLING PROCESSED)
                            £ 201
                                                                                                                                 SYST
                                                                                                                                  SYST
                            SHIFNE
                                                                                                                                 1242
                 C
                                                                                                                                 SYST
                                                   / NMSYS, NUSIE, NMSUJ(2,43), NGCOMP(43),
                                                                                                                                 1212
                          COMMON / NAMES
3.5
                 SYST
                                                                                                                                 1242
1242
                                                                                                                                 SYST
                                                  - LOUNT OF DIFFIRENT APPROPRIATION CCCLS
- AFFROMRIATION CODE NAMES
                            NAP
                                                                                                                                 TZYZ
                                                                                                                                                  25
                                                                                                                                 5757
                            AFFECT I
                                                   - PLACENTAGES FOR CBS LLEMENT COST SPLITS
                            SPCL( , )
                 c
                                                                                                                                 1242
                                                                                                                                                  27
                                                  - COUNT OF THE LIFE CYCLE PHASES
- FIRST COD ELEMENT NUMBER OF LACE FRASE
- COS CLEMENT NUMBER FOR PAGE BREAKS
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5757
                            NEH
IEH( )
                 Ĉ
                                                                                                                                 5 Y S T
                            IF9 ( )
                 C
                                                  (LAST CBS NUMBER FOR THE PAGE)

- TITLES OF CBS PHASES

- FLEET (SYSTIM) SIZE

- LOMEST CCST LELIMENT LEVEL FU BE PRINTED

(LOMEST LENEL TO BE - CLLED OF WITHIN PHASE)

- TOTAL MOVESTIEND COST
                                                                                                                                 SYST
                            IPHASE ( . )
                            FLEHT?
                            NEOLL C. 1
                                                                                                                                 SYST
                                                                                                                                  SIST
11
                            FCTCT
                                                                                                                                 SYST
                                                   - TOTAL INVESTMENT COST MINUS TOTAL RIFOUT
                            TOTING
                                                                                                                                 SYST
                                                                                                                                                  57
                                                   - TOTAL PIFOUT CUST
- HISSILE OFFIC COST
- HUMBER OF OBS ELEMENTS TO BE INCLUDED IN FLYAMAY COSTS
                                                                                                                                 SYST
                            TOTRIF
                            SMISPE
                            HOFLY
                                                                                                                                 SYST
                                                                                                                                 SYST
                                                                                                                                                  41
                                                  - (U) ELEMENT NUMBER FOR FLYAMAY CUSTS
- NUMBER OF YEARS IN SHIP INSTALLATION TABLE
- YEARS GOVERED BY THE SHIP INSTALLATION TABLE
                            IFLY: (H( )
                                                                                                                                  TBLE
                            NOYES
IYEAKS
                                                                                                                                 12Y2
12Y2
                                                  - NUMBER OF YEARS IN SHIP ENSTALLATION TRACE
FLUS UNL (CCLUMNS FOR FRINTING SHIPPING TRACE)
- FUCTNOTES FOR FISST THO MAJUR CUTFUT CHAFTS
                                                                                                                                  3727
                                                                                                                                 SYST
                                                                                                                                 SYSI
                            FROTEST . 1
                                                                                                                                 5451
                           COMMON / MISC / MAP, APPNO(7), SPUL(3, e, 2), NPH, IFH(4), IPE(3), IPHAS= (2, 4), FUE(T7, AFGUL(4), FUTOT, TOTINY, TOTRIF,
                                                                                                                                 SYST
                                                                                                                                  EYET
                                         SMISHCORDFLY, LFLYFOR (25) AND YES, LYCAPS (12), LYES,
                                                                                                                                 1242
                                         FRUTES (5,12)
                                                                                                                                 2Y51
                                                                                                                                                  52
                           INTEGER AFFRU. SPUL . FLL. TZ
                                                                                                                                 2757
                                                                                                                                 5Y5T
                                                                                                                                 MSZ
                     PS2
PS3
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The second secon

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SUFMOUTING INFUPO
                                              4/74 011=2
                                                                                                                   FT# 4.5+435
                                                                                                                                                     +1/31//5 25.53.41
                                                             - MASS STOLAGE UNITS COMMON RELOVE LINGTH
                                   L. Ne
                                                                                                                                                         MS2
                                                             TYPICALLY 191)

- NUMBER OF BEHNENTS IN THE COLLEGEN

- NUMBER OF EQUIPMENTS IN THE COLLEGENT
                                                                                                                                                         ٥٤٩
                                   NWES
                                   ICCTF
                                                                  LLEMENTS TABLE
                                                                                                                                                         rs.
                                                             - (15 HOLLS) FRECH L-NOTH OF 7 PREAYS
IN THE "CRAVES" COMMEN
- (930 HCHCS) FRECHD LINGTH OF 2 R HAYS
IN THE "CCRVES" COMMON
                                   L15 ú
                                                                                                                                                         M52
                                                                                                                                                         M54
                                   ر د د یا
                                                                                                                                                         M54
M54
                                                                                                                                                                            1÷
15
                                 COMMON / MUZ / LUNK, HWAS, 100 TA, L150, L190
                                                                                                                                                                             16
                                                                                                                                                         MSZ
MSZ
                                                                                                                                                                             17
                                                                                                                                                                             10
                                                                                                                                                         KEL T
                      NEUT
 15
                      C VARIOUS CIFER AREAYS AND EQUIVALENCED TO THE "ARAY" ARRAY AS ILL
                                                                                                                                                         KPUT
                                                                                                                                                         KPLT
                                                        = ARAY(1,1)
                           - SLCCM I HOW
                               BUDGET | CG = ARAY(1,2)
INPUPC | ICKEC = MHAY(1,1)
                                                                                                                                                         NFLT
                                                                                                                                                         NELT
                                                          = ARAY(1.1)
                           - COMPONEL FOR
                                                        = ARAY (1.1)
                            - APCELP & IRAY
                                                                                                                                                         NEL 1
                                                                                                                                                         NEL T
                                 COMMEN / NEUT
                                                               / ARAY(160.2)
                                                                                                                                                         NPUT.
                                                                                                                                                         KELT
                                                                                                                                                         CERVES
                          ***** LERVES (COST ESTIMATING RELATIONSHIP (CER) VALUES) COMMON ******
                                                                                                                                                         CLEVES
                                                                                                                                                         CHALLS
                      THE CEFVLS CUMMON CURTAINS LOCATIONS FOR STORAGE OF THE CER
LINFUT CARC COUNT, THE FUM 10°5, THE CER EQUATION NUMBERS, THE
CINCH CROSS FEFERENCE NUMBERS, THE INFUT FARAMETERS, THE ADDITION
CIGE CERS CURTICUE, STURAGE APPRAY FOR EQUIPMENT NAME, CLR INGEX,
CIANC TRUTZNEUT INDUXES FOR ALL EQUIPMENT INFUT.
                                                                                                                                                         CEMVLS
CEMVLS
                                                                                                                                                         CLAVES
                                                                                                                                                         CERVES
                                   CLPCT
                                                             - NUMBER OF CER'S FOR THIS PARTICULAR EQUIFMENT
                                                                                                                                                         LENVLS
                                                                NUMBER OF CER'S FOR INTO PARTICULAR EQUIPMEN
(1 MOFO)
(F CR C) ALFHADETIC CHARACTER INCICATING
"FACTUR" OR "CER". (15 MCHOS)
COULLING NT NUMBER TO METCH THIS COP APPLIES
                                                                                                                                                         CERVES
                                                                                                                                                                            13
                                   IFOrC( )
                                                                                                                                                         LERVES
                                                                                                                                                         CEAVES
                                   IFOWIC
                                                                                                                                                         CHMULS
                                                                                                                                                                            16
17
                                                                 (150 HORCS)
                                                                                                                                                         CEFVES
                                   TAGE
                                                             - GEN CONTROL FLAGS (O THAU 6) FOR ACUITIVE OLES OF SUBELLMENTS. I INCICATES NO ADDING. I THEU E INDICATE AGO UP SUB-LEMENTS.
                                                                                                                                                         CE-NES
                                                                                                                                                         CEMVES
                                                                                                                                                                            19
                                                             1 (MAIL & INDICATE ADD OF THE CONTINUE IN THE (150 MONES)

- (CFE ENLE NUMBER FOR CIP EQUATIONS IN THE (CONTUMP) SUB-OUTING. (15. MOLES)

- OBS ELEMENT NUMBER OLD IN CHOSS PERCHENCING A PRIVIOUSLY COMPUTER GES LLCHONT. AT PIESENT CRLY GER EQUATION NUMBER & ALLUMS GROSS REFERENCING. 3 INCICATES NO CROSS-REF.
                                                                                                                                                         CENVLS
1 :
                                                                                                                                                        CETVLS
                                                                                                                                                                            21
                                   ICE+NC
                                                                                                                                                        CERNLS
                                                                                                                                                         CERVES
                                                                                                                                                                            23
                                   IXRLETO
                                                                                                                                                        6... VLS
                                                                                                                                                                            24
25
11.
                                                                                                                                                         CLAVES
                                                                                                                                                                            26
27
                                                                                                                                                        CERVES
                                                                                                                                                                            źb
                                   IXSEFAO
                                                             - CER CONT. OF FLAGS FOI DROSS-REFERENCING CER SUB-RESMENTS. (150 MOROS)
                                                                                                                                                        CERVES
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07/31/79 23.53.41
    SULFIGHTINE INPUPD
                                74/74 OFT=2
                                                                                      FTN --6++33
                                              - STORES "FACTOR" PARAPETERS. (901 HORDS)
11>
                          IFSTORE
                                                                                                                   CERVLS
                                              - STORES NUMBERICAL FARAMETERS. (500 MOROS)
                 C
                          PSSTOF &
                                                                                                                   CEF VLS
                          ICER( )
                                                 A SINGLY-SUBSCRIPTED ARRAY CONTAINING A
                                                                                                                   CEAVES
                                                                                                                                  33
                                                 HAXIHUM OF 160 CATA THIFLETS WHOSE MEMBERS
                                                                                                                   CERVES
                                                                                                                   CERVLS
                                                 AREI
                                              - LOUIPHENT NAME
                                                                                                                   CERVLS
120
                 С
                             ICE+(1,4,7,
                             ETC)
ICER(2,4,0
                                                                                                                                  17
                                                                                                                   CERVES
                                                INDEX FOR MASS STORAGE UNIT 3. INDEX GEGINS AT 1 AND INCREMENTS BY 9 (1.11,119.
                                                                                                                   CERVLS
                                    ETCI
                                                                                                                   CERVLS
                                                                                                                                  39
                                                 ETC). THE FOLLOWING DATA RECORDS ARE
                                                                                                                   CERVLS
                                                                                                                                  40
                                                 INDEXEGI
                                                                                                                   CERVLS
125
                                                          CERCT
                                                                          6
                                                                               1XREFNO
                                                                                                                   CLEVLS
                                                                                                                                  42
                                                                                IXECEAD
                                                                                                                                  43
                 С
                                                          IFORC
                                                                                                                   CERVLS
                                                          IROHIC
                                                                                IFSTOFF
                                                                                                                   CEAVLS
                                                          IADD
                                                                                ESSTORE
                                                                                                                   CERVLS
                                                                                                                                  45
                                              5 ICERNC
- INDEX FOR MASS STOKAGE UNIT 2 AND 3.
INDEX BEGINS AT 18 AND INCREMENTS BY 2
(18.20,22,ETC) AND IS IDENTICAL TO THE
                 c
                                                                                                                   CEAVLS
                                                                                                                                  46
116
                             ICEF(3,6,9
                 c
                                                                                                                   CENVLS
                                                                                                                                  LA
                                                                                                                   CEAVES
                                                                                                                                  49
                                                 THIRD MEPBER OF DATA TRIPLET STORED IN
                                                THE IREC AFRAY.

SUBELS IS A CROSS-HATCHEC AFRAY WHICH IS
RELATED CNE-TO-CNE TO THE CBS.
IT IS USED LCCALLY WITHIN 'COMFCMP' AND
'CERCOPP' FOR INTERIM STORAGE OF UP TO
1 !5
                                                                                                                   CERVLS
                                                                                                                                 51
                          SUBELS( , )
                                                                                                                   CERVLS
                                                                                                                                  52
                                                                                                                   CERVLS
                 C
                                                                                                                   CERVLS
                                                                                                                                  54
                                                                                                                   CERVLS
                                                                                                                                  55
                                                SIX SUBLICHENTS, 1 THRUFUT, AND 1 TOTAL VALUE FOR FACH CBS LLEMENT. A FACTOR IS A PRECURSOR OF CNE OR FORE
                                                                                                                   CLAVLS
                                                                                                                   CEÁVLS
                                                                                                                                  57
                 Ç
                          FACTOR( )
                                                                                                                   CERVLS
                                                                                                                                 56
                                                 CERS.
                                                                                                                   CERVLS
                                                                                                                                  59
                                                                                                                   CEFVLS
                                                                                                                                  £μ
                                                                                                                   CEHVLS
                                                                                                                                  €1
145
                         COMMON /CERVLS/ CERCT, IFORC(150), IROMID(150), IADD(150), ICERNO(150), IXREFNO(150), IXREFAD(150), IFSTORL(6,150), PSSTORL(6,150), ICER(300),
                                                                                                                   CERVLS
                                                                                                                                  €2
                        C
                                                                                                                   CLKVLS
                                                                                                                                  63
                                                                                                                   CEMVLS
                                                                                                                                  €4
                                               SUEELS(8.150). FACTORS(150)
                                                                                                                   CERVES
                                                                                                                                  Ł5
                         INTEGER CERCT
15.
                                                                                                                   CERVLS
                                                                                                                                  €6
                                                                                                                   CEHVLS
                   C
                                                                                                                   CERVLS
                                                                                                                                  £δ
                                                                                                                   CERVLS
                                                                                                                                  ٤y
                             ARRAY CEFINING THE ROLL-OF INPUT NUMBERS, TOTAL COUNT OF COST ELEMENTS WITH SPECIFIC ROLL-OF NUMBERS TO BE COTPUT, ARRAY OF SELECTED HBS ELEMENTS NUMBERS, SELECTED ROLL-OF
                                                                                                                   ROLLECT
                                                                                                                                   2
                                                                                                                   ROLLPCT
1 5 5
                 C
                                                                                                                   SCLLFCT
                 C
                             OUTFUT FLAG
                                                                                                                   FOL LPCT
                         COMMEN / RELUPET / INCLL(154), KOLLTET, ROLLSL(153), ROLLFLG
INTEGEN ROLLTOT, ROLLSL, ROLLFLG
                                                                                                                   ROLLECT
                                                                                                                                   6
                                                                                                                   RCLUPGT
1 = 0
                                                                                                                   ROLLECT
                                *********** BUOG CCHHON ***************
                                                                                                                   RCLUPCT
                                                                                                                   RCLUFCT
                         COMMCN / BUDG / TOTC(7,2), TOTS(4,2,7), LENR9, IPRCCCC(125L)
                                                                                                                   EUCC
                                                                                                                   9 UC 6
                                                                                                                   CHEFTS
                   CHAFTS
CHAFTS
                                                                                                                   CHAFTS
                          CHRICHT CUNTAINS THE MAJOR QUITPUT CHART CONTROLS
J - GENERATE CHAFT
                                                                                                                  CHAFTS
CHAFTS
174
                                            - NO GENERATION OF CHART
                                                                                                                   CHEFTS
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| | SCEROUTINE | INFLPD | 14174 G | FT=2 | FTN 4.6+433 | .7/31/75 | 23.53.41 |
|------|------------|-----------|--------------|------------------|--|----------------|----------|
| | | | | | | | |
| | ď | | | | | CHAFTS | 9 |
| | ì | | KTCNT (1) | - IF FOUAL TO : | - CALLS HBSOUT(1) FOR EQUIPMENT | CHAFTS | 10 |
| | | , On | KICHI (1) | | CYCLE COSTS - FLEET SUMMARY | CHAFTS | ii |
| 175 | | | RTCNT (2) | | - CALLS HESCUT(2) FOR UNIT | CHAFTS | 12 |
| 117 | Č | | K 1001 127 | | EQUIPMENT ELEPENT | CHAFTS | 13 |
| | č | | | - IF NE . TO J | | CHAFTS | 14 |
| | à | | | HBSOUT(2) HAS | | CHAFTS | 15 |
| | | | RTChT (3) | | - CALLS WESOUT(3) FOR SHIP | CHAFTS | 16 |
| 1 *0 | | | | CLASS SUPMARY | | CHAFTS | 17 |
| • • | ò | | RTCNT (4) | | - CALLS BUDGOP FOR LIFE | CHAFTS | 16 |
| | | 5 | | | PUCGET AFPROFRIATIONS | CHAFTS | 19 |
| | Č | | RTCNT (5) | - IF NE. TO 3 | - CALLS ROLCHT FOR OUTPUT EY | CHAFTS | 26 |
| | | 5 | | RCLL-UF NUMBE | | CHAFTS | 21 |
| 1 75 | | | RTCNT (6) | - 1F EQUAL TO L | - LISTS THE SUBELS ARRAY | CHAFTS | 22 |
| • | | | | | FUR PROOFING | CHAFTS | 23 |
| | | Š | | | | CHAFTS | 24 |
| | | | | | | CHAFTS | 25 |
| | | COM | MCN / CHARTS | / CHRICHT (15) | | CHAFTS | 26 |
| 196 | | INT | EGER CHRTCHT | | | CHAFTS | 27 |
| | (| . ****** | *** CSTAB (E | QUIPMENT QUANTIT | IES) COPHGN ************ | CSTAB | 2 |
| | | 3 | | | | CSTAB | 3 |
| | (| C QC | MFT | - QUANTITY OF E | DUIPHENT ALREADY DEPLOYED | 94122 | 4 |
| | | 3 | | | ALL SHIPCLASSES (G1) (INTEGER) | CSTAB | 5 |
| 195 | | | MPT 2 | | JUIPMENT TO BE MANLFACTURER | CSIAB | 6 |
| | | | | | VESTMENT) CVER ALL SHICLASSES | CSTAE | 7 |
| | | 2 | | (Q2) (REAL) | | CSTAB | 8 |
| | | | TABLE | | ICNED APRAY WHOSE MEMBERS ARE | CSIAE | 9 |
| | | 3 | | A SEPIES OF | | CSTAR | 10 |
| 570 | | 2 | | | LASS NAME | CSTAB | 11 |
| | | 2 | | | QUANTITY OF EQUIPMENT FOR EACH | CSTAG | 12 |
| | | 2 | | • | ON A FARTICULAR SHIPCLASS | CSTAG | 13 |
| | | c | | | JANTITY OF EQUIFHENT FOR EACH | CSTAB | 14 |
| | | C | | | ON A PARTICULAR SHIPCLASS | CSTAB CSTAB | 15 |
| 5 | | C | | | MEMBERS ARE GIVEN FOR EACH | CSTAR | 16 |
| | | C | | (VALUES ARE I | AKING A SERIES OF CATA TRIPLETS) | CSTAB | 17 18 |
| | | | **** | | ICNED ARFAY OF THE INVESTMENT | CSTAB | 19 |
| | | i CS | TABEL | | DUIPMENT FOR EACH SHIF ON A | CSTAR | 20 |
| 216 | | č | | | IPCLASS. DATA ELEMENTS PUST | CSTAR | 21 |
| 210 | | C | | | THE SAME SHIPCLASS OFCER AS | CSTAB | 22 |
| | | | | | THO ARRAYS MAY BE THOUGHT | 94120 | 23 |
| | | Ċ | | | S OF DATA QUADRUPLETS. | CSTAL | ž4 |
| | | Č | | 01 43 H 35K11 | 3 01 0417 4040101 22101 | CSTAR | 25 |
| 215 | | | | | | CSTAR | 26 |
| ••• | ` | | MCN /CSTAB/O | CHPT(130).OCHPT2 | (10J), CSTA PLE (375 J), CSTABEL (125 J) | CSTAR | 27 |
| | | | EGEF OCHPT.C | | | CSTAB | 28 |
| | (| | | E TO BE USED ON | ALL CHARTS | CENTLE | 2 |
| | | | | / TITLE (3) | | GENTLE | 3 |
| 221 | | | EGER TITLE | | | GENTLE | 4 |
| | | c | | | | SHIFINS | 2 |
| | | | TOTT MARRAY | (IREL ARRAY) COM | 10N ************* | SHIFINS | 3 |
| | | Ċ | | | | SHIPINS | 4 |
| | | C | | | | SHIFINS | 5 |
| 225 | | | | | RIPTED ARRAY WHOSE FIRST POSITION | SHIFINS | 6 |
| | | | | | LASS/EGUIPPENT COMBINATIONS. | SHIFINS | 7 |
| | | | | | RIES OF TRIPLETS WHOSE | SHIFINS | 8 |
| | 1 | C MEMBERS | AREE SHIFCL | ASS NAME, EQUIPM | ENT NAME, MS 3 INCEX. | SHIFINS | 9 |
| | | | | | | | |

| | SUBROUTINE INFUPC | 74/74 | UF T = 2 | FTNc+433 | 07/31/79 | 23.53.41 |
|-------|---------------------------------------|---------------|----------------------|---|--------------------|----------|
| | c 1 | REC(1) | - THE RUNNING SU | M OF THE TOTAL NUMBER OF UNIQUE | SHIFINS | 10 |
| 23 | | | | FRENT COMEINATION IN THE | SHIFINS | 11 |
| | Ċ | | EQUIPMENT LEVE | | SHIFINS | 12 |
| | | REC(2,5,0, | - THE NAME OF TH | E SHIP CLASS | SHIFINS | 15 |
| | С | 11,ETC) | | | 24I † I h 2 | |
| | | REC(3,6,9 | - THE NAME OF TH | E COUIPMENT | SHIFINS | |
| 2 3 | | 12,ETC) | | | SHIFINS | 16 |
| | | REC14,7,10 | | STORAGE UNIT 3. AN INTEGER | SHIFINS | 17 |
| | Ç | 13,ETC) | | NG A 1: AND INCREMENTING BY | SHIFINS | 18 |
| | (| | | 1,22,24,ETC. THIS INGEX IS | SHIFINS SHIFINS | 19 20 |
| | C C | | | UCATION OF A RECORD (LENGTH) On mass storage 3 which | SHIFINS | 20 21 |
| 241 | , , , , , , , , , , , , , , , , , , , | | | NIT COSTS OF THE EQUIPMENTS | SHIFINS | 22 |
| | C. | | | COMPLTED BY SUBROUTINE | SHIFINS | 23 |
| | č | | CUMPCHP). | TOOM CIEE OF SOURCE INC | SHIFINS | 24 |
| | č | | 33111 3111 34 | | SHIFINS | 25 |
| 249 | | MMCN / MARRA | Y / 1REC(375u) | | SHIFINS | |
| | С | | | | SHIFINS | 27 |
| | | HIFINS (SHIP | SUMMATION AND INS | TALLATION TABLET COMMON ***** | SHIFINS | 28 |
| | С | | | | SHIFINS | 29 |
| | | HIFSLH() | | OTAL NUMBER OF UNIT SHIPS FOR | SHIFINS | |
| 25 | | | | S FOUND BY INSPECTION OF | SHIFINS | |
| | c | | THE SHIP INSTA | | SHIPINS | |
| | | INSTE(,) | | YMENT/INSTALLATION SCHEDULE | SHIFINS | |
| | Ç | | TABLE. FOR EAC | | SHIHINS | 34 |
| | c s c | | | - SHIP CLASS NAME | SHIFINS | 35 |
| 25 | S C | | | 7) - THE YEARLY NUMBERS OF | SHIFINS SHIFINS | 26 37 |
| | Č | | | SHIPS OF THIS CLASS TO BE YED/INSTALLED | SHIFINS | 36 |
| | | HIPSP() | | ER OF UNIT SHIPS FOR EACH | ZMIFINS | 30 29 |
| | Č | intract 1 | | T IS THE SAME COUNT AS | SHIFINS | 40 |
| 2 € 5 | | | | ER, IT IS DEFINED IN # | SHIFINS | 41 |
| • • | č | | | AFTER LEROR-CHECKING IN | SHIFINS | 42 |
| | č | | | CO-LGOPS WHICH | SHIFINS | 43 |
| | Ğ | | DETERMINE THE | TOTAL COSTS BY SHIP CLASS | SHIFINS | 4.4 |
| | Ċ | | | | SHIFINS | 45 |
| 3 65 | | | | SINSTO (43,7), SHIFSP(43) | SHI FINS | 46 |
| | | | r, SINSTB, SHIFSM | | SHIFINS | 47 |
| | | MENZION TOKE | | | INFLFC | 14 |
| | | TUF INDEX AR | FAYS, MS INDEX LEN | GTHS. AND HS RECURD LENGTHS | INFUFE | 15 |
| | C*** | | | *** | INFUFD | 16 |
| 271 | | | 221), IX3(221), IX-(| | INFLPC | 17 |
| | | MENSION IXEC | 961),IX9(1251),IX1 | 5(1351) | INFLFC INFLPC | 16 19 |
| | | MENSICH INFO | | | INFLFC | źu 19 |
| | | TEGEF FS | ,,,,,,,,,, | | INFLFC | 21 21 |
| 2 79 | | MENSICH NH (2 | 1 | | INFLEC | 22 |
| • | | UIVALENCE IA | | | INFUFD | 23 |
| | | TEGEL CHAR, S | | | INFUFE | 24 |
| | | | CHAFI, CHAR2 | | INFUFC | 25 |
| | | | | D. CERNO, XREFNC, XREFAC, CERCTX6 | INFLEC | 26 |
| 24 | | | | IXSS/17/, IXSSD/18/, LENR/15J/ | INFLEC | 27 |
| | | | J / CHAH / 10H | , | INFUPC | 28 |
| | 04 | | LSO/10/, LSC/2/ | | INFLEC | 29 |
| | С | | | | INFUFO | 30 |
| | C | | | 6 CHARACTERS OF EITHER THE | INFUFE | 31 |
| 2-5 | : C | SHIP CLASS | UR LQUIPMENT NAME | S | INFLEC | 32 |

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w7/31/79 23.53.41
                                                                                      ETH wafters
    SCEPSUTING INFUPD 14/74 OFT=2
                                                                                                                  INFUPE
                        DATA MASK / 7777777777777300010466 /
                                                                                                                                 33
                                                                                                                   INFLEC
                                     INITIALIZE CHARACTER LOCATION USED TO DECOME ESTABLE
                                                                                                                   INFUFO
                                                                                                                                 35
                               LCCATIONS & ROLL UP NUMBER, AND CLUTAL FOINT LITERAL CHAF1 / 1JH /, MYDOT / 1H. /
                                                                                                                  INFLEC
                                                                                                                                 36
37
                        DATA CHAFT / 11H
24.
                C
                                                                                                                   INFUFE
                                                                                                                                 38
                        RECORD LENGTH INDEX 17 UNIT 3
DATA LENG17 / 3753 /
RECORD LENGTH UNIT 9
                C
                                                                                                                   INFUPU
                                                                                                                                 34
                                                                                                                   INFLFC
                                                                                                                                 40
                C
                                                                                                                   INFLEC
                                                                                                                                 41
                        DATA LINGS / 14 /
CER CATA STORE UNDER LENGER NG. OF INDEXES
                                                                                                                  INFLEC
295
                                                                                                                                 42
                                                                                                                  INFUED
                                                                                                                                 43
                c
                         DATA LENCER / 9 /
                                                                                                                   INFLEC
                        DATA LENF9 / 1250 / DATA LENF10 / 1330 / DATA INDXTCT / 1251 /
                                                                                                                  TREUEL
                                                                                                                                 45
                                                                                                                   INFUFE
                                                                                                                                 46
                                                                                                                   INFUPC
                                                                                                                                 47
3 10
                        INCEX LENGTH OF CER UNIT &
DATA LENET / 90 /
FECORO LENGTHS OF CER DATA ON HS UNIT &
                C
                                                                                                                  INFLEC
                                                                                                                                 46
                                                                                                                  INFLPE
                                                                                                                                 44
                                                                                                                   INFLFE
                                                                                                                                 50
                C
                                                                                                                                 51
52
                        OATA L150 / 150 /, L300 / 903 /
                                                                                                                  INFLEG
                                                                                                                  INFUPC
3 ., 6
                c
                                      SPECIAL FLAG (ISPFLG) TO DIFFERENTATE BETHEEN NORMAL
                                                                                                                   INFUFC
                                                                                                                                 53
                               INPUT AND EQUIPMENT DEFINITION INFUT = 3 SYSTEM, SHIP CLASS, EQUIPMENT NAMES
                                                                                                                   THEUEC
                                                                                                                   INFUFE
                                                                                                                                 55
                c
                                 = 1 EQUIPMENT, TPUT, NEUT, CER, DATA
                                                                                                                   INFLEC
                                                                                                                                 5.7
314
                        CATA ISPFLG / J /
                                                                                                                  INFLPE
                                                                                                                   INFLEC
                c
                                                                                                                                 58
                                      INITIALIZE THE CER INDEX COUNTER, CER SUBSCRIPT
                                                                                                                   INFLPE
                Ç
                        STORAGE COUNTER

DATA INCCER / -6 /, ISUBCER / C /

DATA SFCL / 0,0,4 /
                                                                                                                   INFLPC
                                                                                                                                 6.0
                                                                                                                   INFUFC
                                                                                                                                 E1
                                                                                                                   INFUPC
315
                        DATA NAF, APFRO/7,4HRDTE,3HSCN,3HMPN,3HOPN,3HMCN,3HMPN,3HOPN/
SET UP SHIP CLASS AND EQUIPMENT NAMES
                                                                                                                  INFLEC
                                                                                                                                 F 3
                                                                                                                   INFUPE
                C
                                                                                                                                 64
                                                                                                                   INFLFC
                                                                                                                                 €5
                            INITIALIZE THE EQUIPMENT SAVE COUNTER (FOR INGEXES) BOTH EQUIPMENT AND CER
                                                                                                                                 66
67
                                                                                                                  INFLEC
                ¢
                                                                                                                  INFUFC
320
                        ICCTR = J
                                                                                                                   INFLEC
                C
                                                                                                                  INFLEC
                                                                                                                                 €9
70
                                                                                                                  INFLPC
                č
                             INITIALIZE THE SHIP AND EQUIPMENT COUNTERS
                         ISHPCT = 0
                                                                                                                   INFLFC
325
                         ICOMOT = J
                                                                                                                  INFLPC
                                                                                                                                 72
                                                                                                                                 73
                c
                                                                                                                  INFLFE
                                                                                                                   INFLEO
                         CALL OFENMS ( 2, IX2, LENF+1, 0 )
                                                                                                                                 75
                         CALL OFENMS (3,1x3,LENF+1,C)
                                                                                                                  INFLEC
                        CALL OFENMS (+,1X4,LENF+1,U)
CALL OFENMS (+,1X4,LENF+1,U)
CALL OFENMS (+,1X9,LENF+1,U)
CALL OFENMS (10,1X10,LENF1U+1,U)
                                                                                                                                 76
                                                                                                                  INFUFC
                                                                                                                   INFUFC
                                                                                                                   INFLEC
                                                                                                                                 78
79
                                                                                                                  INFUPD
                                                                                                                   INFUFC
                     18 FORMAT (1H1,9X,16HCARU INPUT LISTING //)
                                                                                                                  INFLEG
                                                                                                                                 ŧ1
3 35
                                                                                                                  INFLEC
                                                                                                                                 ė 2
                                                                                                                  INFUFE
                              AF AB IN GENERAL TITLE (MAXIMUM OF 26 CHARACTERS ALLOWED)
                                                                                                                  TRELEC
                                                                                                                                 14
                         READ(5.19) TITLE
                                                                                                                  INFLEC
                                                                                                                                 25
                     19 FORMATIZATU.A61
                                                                                                                   INFLPO
                                                                                                                                 86
                                                                                                                  INFLFC
INFLFC
34.
                        HRITELE, 19191 TITLE
                                                                                                                                 £7
                  1919 FORMAT (1)x, 2411, 46)

READ IN CATA FREVIOUSLY FOUND IN INIT
                                                                                                                                 88
                                                                                                                  INFUFO
```

```
47/31/79 23.53.41
    SCERUUTING INFUPO
                                 74/74 04 1=2
                                                                                       FIN ++ ++433
                         PEAD(5,835) NHES,NPH, (IPR(1), I=1, 3)
                                                                                                                    INFLEC
                                                                                                                                   ę٥
                                                                                                                                   91
                   WRITE(E,207) NWUS, NPH, (IPU(I), I=1,3) 305 FORMAT (515)
                                                                                                                    INFUFD
                                                                                                                    INFLFC
                                                                                                                                   ۶2
3-5
                   807 FOFMAT (1 JX, 515)
                                                                                                                    INFLFC
                                                                                                                                   ç3
                                                                                                                    INFUFG
                                                                                                                                   ç.,
                                                                                                                    INFUPC
                         DO 72 #=1.4
                                                                                                                    INFLEC
                                                                                                                                   96
                         READ (5.636) IFHA SE (1, K), IPHASE (2, K), IFF(K), NROLL (K)
                         WRITE( . . . . . I FHASE (1, K), I FHASE (2, K), I PH (K), NROLL (K)
350
                                                                                                                    INFLEC
                                                                                                                                   ٩b
                         CONTINLE
                   836 FORMAT (241: ,215)
808 FORMAT (11x,2410,215)
                                                                                                                    INFLEC
                                                                                                                                   94
                                                                                                                    INFLFC
                                                                                                                                 100
                         00 5 I=1, LENH
                                                                                                                    INFUPO
                                                                                                                                  1.1
                      IREC(I) = u
5 IOFEC(I) = )
355
                                                                                                                    INFUFE
                                                                                                                                  102
                                                                                                                    INFLFE
                                                                                                                                  103
                                                                                                                    INFUFC
                                                                                                                                  1 (4
                                                                                                                    INFUFC
INFUPC
                                                                                                                                  145
                         DO SE I=LENR.LENK17
                                                                                                                                 146
                         IRFC(I) = u
                                                                                                                    INFLEE
                                                                                                                                 107
36.6
                     56 CONTINUE
                                                                                                                    INFURG
                                                                                                                                  108
                                      INITIALIZE THE CER ARRAYS
                                                                                                                    INFUPC
                                                                                                                                  109
                         CERCT = .
                                                                                                                    INFUPC
                                                                                                                                 110
                         00 6 I=1.L150 IFORC(I) = 10H
                                                                                                                    INFUFC
365
                                                                                                                    INFUFE
                                                                                                                                 112
                         IROWID(I) = C
                                                                                                                    INFLEC
                                                                                                                                  113
                         ICERNO (1) = J
                                                                                                                    INPLPC
                                                                                                                    INFUFE
                         IXREFNC(I) = 3
                                                                                                                                  115
                         IXPEFAC(I) = 0
                                                                                                                    INFLPO
                                                                                                                                 116
37:
                         1ADO(1) = C
                                                                                                                    INFUFB
                         00 6 J=1.6
IFSTCFE(J,I) = 10H
                                                                                                                    INFLPC
                                                                                                                                 118
                                                                                                                    INFUFE
                                                                                                                                 119
                         PSSTORE(J.1) = 0.
                                                                                                                    INFLFO
                      6 CONTINUE
                                                                                                                    INFLEE
                                                                                                                                 121
                         CONTINUE
USING "IORLC" ANT "IREC", HRITE ALL ZERO RECORDS ON MS 4.
GO 1G 1=1, LENF
IF ( I .EG. IXSS ) GO TO 10
CALL HRITMS ( 4. IOREC, LENR, I. -1 )
375
                                                                                                                    INFUFE
                                                                                                                                 122
                                                                                                                    INFLEC
INFLEC
                                                                                                                                 123
                                                                                                                                 124
                                                                                                                    INPLPE
                                                                                                                                 125
                     19 CONTINEL CALL MEITHS & 4. IREC. LENKIT, IXSS. -1 )
                                                                                                                    INFUFC
INFUPO
                                                                                                                                 126
380
                                                                                                                    INFLEC
                                                                                                                                 120
                                      INITIALIZE THE GER STORAGE UNIT 8
                                                                                                                    INFUPE
                         WRITE ZERGS AND BLANKS ON MS 8.
                                                                                                                    INFLEC
                         DO 11 I=1, LENF c, LENCER
                                                                                                                    INFLEC.
                         CALL WRITMS (8, LERCT , 4, , 1 , -1)
CALL WRITMS (8, IFURC , LISO, I+1, -1)
CALL WRITMS (8, IRUMIC , LISU, I+2, -1)
                                                                                                                                 122
3 45
                                                                                                                    INFLFE
                                                                                                                    INFLEC
                                                                                                                    INFLEE
                                                                                                                                 134
                         CALL HAITMS (0. IAOO . L15J, I+3. -1)
CALL HAITMS (8. IGERNO . L15J, I+4. -1)
                                                                                                                    INFLEC
                                                                                                                                 1 35
                                                                                                                    INFLFC
                                                                                                                                 136
391
                         CALL WEITHS (d. IXREFNO, L15J. I+5, -1)
                                                                                                                    INFLFE
                                                                                                                                 1 27
                         CALL WHITMS (8, IXMEFAD, 1151, 1+6, -1) CALL WHITMS (8, IFSTORE, 1900, I+7, -1)
                                                                                                                                 120
                                                                                                                    INFUFC
                                                                                                                    INFIFO
                         CALL WHITHS (8, PSSTONE, L900, 1+8, -1)
                                                                                                                    INFLEC
                     11 CONTINUE
                                                                                                                    INFLEC
                                                                                                                                 141
                         GO FC 15
345
                                                                                                                    INFUPE
                 C
                                                                                                                                 142
                     12 CONTINUE
                                                                                                                    INPUPE
                                                                                                                                 143
                         GEAD (5.25) INF
IF (EOF(5)) 200,15
                                                                                                                    INFLFC
INFLFC
                                                                                                                                 144
                     15 CONTINUE
                                                                                                                    INF LPC
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74/74 UPT=2
                                                                                                FTN 4.E+433
                                                                                                                             L7/31/79 23.53.41
    SUBROLTINE INFLPO
                  C*** USING "IGGEC" AND "IREC" (ZEROS), WEITE ZEROS ON MS 2.
                                                                                                                                INFLPO
+10
                           OSING 10420 AND 1820 (27803), WELL

OD 16 I=1, LENF

IF ( 1 .50. IXSS ) GU TO 16

CALL PLAOMS (4, 1 CREC, LENR, I)

CALL NEITMS ( 2, IOREC, LENR, I, -1 )
                                                                                                                                INF LPO
                                                                                                                                               140
                                                                                                                                INFUFC
                                                                                                                                               149
                                                                                                                                INFUFC
                                                                                                                                               150
                                                                                                                                INFUEC
                                                                                                                                               151
                                                                                                                                INFLEC
405
                       16 CONTINUE
                                                                                                                                               152
                                                                                                                                INFLFO
                                                                                                                                               153
                           CALL READMS ( 4, IREG, LENKIT, IXSS )
CALL MEITHS ( 2, IREG, LENKIT, IXSS, -1 )
CALL READMS ( 2, IREG, LENKIT, IXSS )
IF (EDF(5),NE.J) GO TO 500
                                                                                                                                              154
                                                                                                                                INFUFC
                                                                                                                                INFUFE
                                                                                                                                INFLEG
                                                                                                                                               156
                                                                                                                                INFUPO
                                                                                                                                               157
41,
                                  REAL AND OLCODE INPUT CATA
                                                                                                                                INFLPO
                  C
                                                                                                                                               150
                                  (SYSTEM -- CBS. EQUIPMENT QUANTITIES PER SHIP)
                                                                                                                                               159
                                                                                                                                INFUEL
                                                                                                                                               1 (J
                       20 CONTINUE
                                                                                                                                INFUPE
                                                                                                                                               1 ( 1
                           IF ( ISPFLG .EG. 1 ) GO TO 910 HEAD (5,25) lnf
                                                                                                                                INFLEC
                                                                                                                                               1€2
4 1E
                                                                                                                                INFUPE
                                                                                                                                               1 (3
                       25 FORMAT (8A18)
                                                                                                                                INFUED
                                                                                                                                               1 64
                            IF (EOF(5)) AQQ, 3Q
                                                                                                                                INFLPC
                                                                                                                                               115
                       3) HRITE (6,31) INF
31 FORMAT (1JX,0A10)
• TEST FIRST 4 CHAR'S (INPUT) FOF SIGNIFICANCE.
                                                                                                                                INFLFC
                                                                                                                                               166
426
                                                                                                                                INFLEC
                                                                                                                                              1 (7
                                                                                                                                INFLPD
                                                                                                                                               1 (8
                   C ** *
                                                                                                                                INFLEC
                                                                                                                                               169
                                                                                                                                INFLFE
                            CALL MCVE (INP(1),1,CHAR,1,4)
                                                                                                                                               170
                            IF (CHAR.EQ. +HNPUT) GO TO 250
IF (CHAR.EQ. +HTPUT) GO TO 200
                                                                                                                                INFLEC
                                                                                                                                               171
                                                                                                                                              172
173
                                                                                                                                INFLEO
₩25
                            IF (CHAR.EQ.4HEQUI) GO TO 153
                                                                                                                                INFUFE
                            IF (CHAF.EG.4HSHIP) GO TO 100
                                                                                                                                               174
                           IF (CHAR.EQ.4HSYST) GO TO 50
IF (CHAR.EQ.4HSEND) GO TO 500
TEST FIRST CHAR FOR COMMENT CARD.
                                                                                                                                TREUEC
                                                                                                                                               1 75
                                                                                                                                INFUPC
                                                                                                                                              1 76
                                                                                                                                INFUFC
                                                                                                                                               1 77
4 36
                           CALL MCVE (CHAR, 8, CHAR, 2, 3)
IF (CHAY, EQ. 1H*) GO TO 20
IF (CHAR, EQ. 1H*) GO TO 20
                                                                                                                                INFLFE
                                                                                                                                               178
                                                                                                                                INFUPO
                                                                                                                                               1:9
                                                                                                                                               180
                                                                                                                                INFUFE
                           GO TO 200
SYSTEM CARD NEAD
                                                                                                                                INFUPE
                                                                                                                                               1 t 1
436
                  c.
                                                                                                                                INFLEC
                                                                                                                                              1 12
                       53 IOREC(1) = INF(1)
IOREC(2) = INF(2)
                                                                                                                                               183
                                                                                                                                              184
                                                                                                                                INFUFC
                            HMSYS = INF(2)
                                                                                                                                INFUFE
                            CALL WEITHS (2.10mEC.LENR. IXS. 1)
                                                                                                                                               117
                            SSFLAG = -1
                                                                                                                                INFUFC
                           GO TO 26
SUBSYSTEM CARD READ
                                                                                                                                INFUPE
                                                                                                                                              1 (8
                  C
                                                                                                                                INFLEE
                                                                                                                                              189
                      100 CONTINUE
                                                                                                                                INFLPC
                                                                                                                                               196
                                                                                                                            . . INFUFC
                                                                                                                                              151
                                INCHEMENT SHIP COUNTER AND STORE SHIP'S NAME
                                                                                                                                INFLEC
445
                                                                                                                                              152
                           ISHPCT = ISHPCT + 1
NOSUB = ISHPCT
ICONCT = 0
                                                                                                                                INFLEC
                                                                                                                                              193
                                                                                                                                INFUFC
                                                                                                                                              154
                                                                                                                                              1 55
                           NMSUB(1,15HPCT) = INP(3)
NMSUB(2,15HPCT) = INP(2)
REFORMAT THE "INP(2)" HORD INTO THE "NM" HORD FOR A LENGTH
                                                                                                                                INFLEC
                                                                                                                                              156
45(
                                                                                                                                INFUPC
                                                                                                                                INFLEC
                                                                                                                                               156
                            OF 1 WORD, LEFT JUSTIFIEC.

CALL FIFHT ( INP(2), NM. 1, 1HL )
                                                                                                                                TNEUFE
                                                                                                                                               159
                                                                                                                                INFUFC
                                                                                                                                              246
                            SHIP = NP(1) . AND . MASK
                                                                                                                                INFLEC
                                                                                                                                               281
                           SSFLAG = 1
GO TC 20
                                                                                                                                INFLEC
                                                                                                                                               202
                                                                                                                                INFUFE
                                                                                                                                              263
```

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67/31/79 23.53.41
   SCEPOUTINE INFUPO
                             74/74 OFT=2
                                                                                     FTN ++6+435
                            COMPONENT LAND READ
                                                                                                                 INFLEC
                 C
                   150 CONTINUE FRONT THE POINT TO LABEL "3.4", PROCESS A "EQUI" RECORD
                                                                                                                 INFLPC
                                                                                                                               245
                                                                                                                 INFUPE
                                                                                                                               206
                                 CURING SHIP CLASS DEFINITION
                                                                                                                 INFLEC
                                                                                                                               207
466
                                                                                                                 INFUPE
                                                                                                                               268
                 ¢
                            INCREPENT EQUIPMENT COUNTER AND STORE EQUIPMENT NAME
                                                                                                                 INFLEC
                                                                                                                               269
                        ICOMET = ICOMET + 1
NOCOME(ISHPET) = ICOMET
                                                                                                                 INFUPE
                                                                                                                               210
                                                                                                                  INFLEC
                                                                                                                               211
M.F.E
                c
                                                                                                                 INFLEC
                                                                                                                               212
                         IF ( INF(2) .EQ. CHAR1 ) GC TO 160
IF ( INP(3) .: C. CHAR1 ) GC TO 170
                                                                                                                 INFUFC
                                                                                                                               213
                                                                                                                 INFLEC
                                                                                                                               214
                C
                                                                                                                 INFUFE
                                                                                                                               215
                   160 CONTINUE
                                                                                                                 INFLEC
                                                                                                                               216
                         SET UP 1 3F 2 WORD HEADING TITLE FOR WBSOUT.

NMCOMP(1,ICOHCT,ISHPCT) = INP(2)

NMCOMP(2,ICOMCT,ISHPCT) = INF(3)
                                                                                                                 INFLFE
                                                                                                                               217
                                                                                                                 INFLEC
                                                                                                                               218
                                                                                                                 INFLEC
                                                                                                                               219
                         GO TC 183
                                                                                                                 INFLFC
                                                                                                                 INFUPE
                С
                                                                                                                               221
                   170 CONTINUE
                                                                                                                 INFLEC
                                                                                                                               222
                         NMCOMF(1,ICOMCT,ISHPCT) = INF(3)
                                                                                                                 INFUPC
                                                                                                                               223
                         MCOPP(2,ICOMCT,ISHPCT) = INF(2)
                                                                                                                 INFLEG
                                                                                                                               224
                                                                                                                 INFUPE
                                                                                                                               225
                   180 CONTINUE
                                                                                                                 INFUEC
                          CCHFICS 1ST 6 LEFT JUSTIFIED CHAFACTERS INTO UNIQUE NAME FOR "SHIP"
                C
446
                                                                                                                 INFLPC
                                                                                                                               227
                                                                                                                 INFLFC
                                                                                                                              228
                         CALL REFIT ( NMCOMP(1, ICOMCT, ISHPCT), NM, 2, 1HL )
                                                                                                                 INFLEC
                        EQUI = NM(1) .ANC. MASK
SSFLAG : 2
GQ TQ 261
                                                                                                                 INFUEL
                                                                                                                              230
                                                                                                                 INFUPC
                                                                                                                              231
405
                                                                                                                  INP LPC
                                                                                                                               232
                            THRLPUT
                C
                                                                                                                 INFLED
                                                                                                                              233
                   200 INC = 0
GO TC 261
                                                                                                                 INFUPC
                                                                                                                              234
                                                                                                                 INFLFE
                                                                                                                               235
                            INPLI
                                                                                                                              236
237
                C
                                                                                                                 INFUPE
                   250 INC = 1
                                                                                                                 INFUFC
                 C++ +
                 C*** "SSFLAG" ASSUMES 3 VALUES PRIOR TO FIRST "BEND" RECORD
                                                                                                                 TRECEC
                                                                                                                              239
                                    - 1 PETHEEN "SYST" AND 1ST "EQUI", "SHIF"
(HHILE READING HOS ELEMENTS)
1 EVERY TIME "SHIF" IS REAC
2 EVERY TIME "EQUI" IS READ
                 C ** *
                                                                                                                 INFLFC
                                                                                                                              243
                 C***
                                                                                                                 INFLFC
495
                                                                                                                 INFLEC
                                                                                                                              242
                 (***
                                                                                                                              243
                                                                                                                 INFUFC
                 C ** *
                                                                                                                 INFUFC
                   260 IF (SSFLAG.LT. )) GO TO 20
                                                                                                                 INFLEC
                                                                                                                              245
                        IF( SSFLAG.CO.1) EQUI = SHIP

HHILE READING SYSTEM DEFINITION FOR EVERY NEW "EQUI" UNDER

THIS "SHIP", ENTER A NEW UNIQUE TRIPLET IN THE "IREC" ARRAY.
                                                                                                                 INFLEC
                                                                                                                              246
510
                                                                                                                 INFUFC
                                                                                                                              2 47
                č ***
                                                                                                                 INFLEE
                                                                                                                              245
                C***
                         TRIPLET = (SHIP CLASS/FOUIFHENT/PASS STORAGE 3 INCEX)
                                                                                                                              249
                                                                                                                 INFLFE
                         N = TRIC(1)
                                                                                                                 INCLEC
                                                                                                                              250
                         (SHIF CLASS/EQUIFMENT) NOT FOUND - ABB
                                                                                                                              251
                                                                                                                 INFLEC
                         N = N + 1
IRFC(1) = N
                                                                                                                 INFUPO
                                                                                                                              252
                                                                                                                 INFLEC
                                                                                                                              253
                         IREC(N+3-1) = SHIP
                                                                                                                 INFUPO
                                                                                                                              256
                         IREC (N+3) = LOUI
                                                                                                                              255
                                                                                                                 INFLEC
                        IREC (N*3+1) = IXSSD + (N-1)*2
CSTAEL: (N*3-2) = SHIP
CSTAELE (N*3-1) = EQUI
                                                                                                                 INFLPC
                                                                                                                              256
510
                                                                                                                              267
                                                                                                                 INFUEC
                                                                                                                 INFUFE
                                                                                                                              258
                                                                                                                 INFLPE
                         LOCAT = (I+3+1)
                                                                                                                 INFUFC
                                                                                                                              2 6 0
```

```
74/74
                                                                                                                                     [7/31/79 23.53.41
    SUEF GUTINE INFUPO
                                                 UP1 = 2
                                                                                                       FIN 4.c+435
                         DECODE INF(7) AND FURM IPPOCUE ARRAY.
                                                                                                                                         INFLEG
                              INP(7) = PROCUREMENT MUNEY (SCA. HPN. OF OPN)
                                                                                                                                                         262
                                                                                                                                         INFUFE
                         IFROCOD
                                       = 2 FOR SUN
= 3 FOR WPN
                                                                                                                                         INFLEC
                                                                                                                                                         2 € 3
                                                                                                                                         INFUPE
                                                                                                                                                         2 (5
                                        = 4 FOR UPN
= 0 FOR NC INP(7)
                                                                                                                                         INFUPD
                                                                                                                                         INFUFC
                                                                                                                                                         2 t 6
                    C
                                                                                                                                                         2 17
                                                                                                                                         INFLEC
526
                              CALL MCVE(INF(7),1, INF7,1,3)
                                                                                                                                         INFLIFE
                                                                                                                                                         268
                              IF(INP7.EQ.3H ) IGOSCOD = 0
IF(INP7.EC.3HSCN) IGOSCOD = 2
                                                                                                                                         IKFUPE
                                                                                                                                                         269
                                                                                                                                         INFLFC
                                                                                                                                                         270
                              IF(INP7.EQ.3HWPN) ICOSCOD = 3
IF(INP7.EQ.3HUPN) ICUSCOC = 4
                                                                                                                                         INFUPC
                                                                                                                                                         271
                                                                                                                                         INFLED
325
                              IFFOCOC(N) = ICO SCOD
                                                                                                                                         INFLFC
                                                                                                                                                         213
                    C DECOCE & STORE THE C/S TABLE VALUES FROM "INP"(5) & "INF"(6).
                                                                                                                                         INFUFE
                                                                                                                                                         214
                                                                                                                                         INFLEE
                                                                                                                                         INFLED
                                                                                                                                                         2 17
536
                                                                                                                                         INFUPO
                              CHARZ = CHAR1
                                                                                                                                         INFLEC
                                                                                                                                                         278
                                                                                                                                         INFUPE
                                                                                                                                                         279
                   C DO-LOOP 295 AND FOLLUWING CODE SCARS THE LEFTHOST (5) CHARACTERS C OF INP(5) FORD, AND ENCODES ANY NON-BLANK ALPHANUMERIC INTEGER C CHARACTERS FOUND THERE INTO A 5-GIGIT INTEGER, STOKEE (AS IHIRD C MEMBER OF A GUADRUFLET) IN OSTABLE AKRAY (I.e., IOTAL CUANTITY C OF ANY EBS ELEMENT REQUIRED ON EACH UNIT OF A GIVEN SHIF CLASS
                                                                                                                                         INFUED
                                                                                                                                                         2 8 0
                                                                                                                                         INFUPE
                                                                                                                                                         261
                                                                                                                                         INFLEC
                                                                                                                                         INFLPC
                                                                                                                                                         2 13
                                                                                                                                         INFUFC
                                                                                                                                                         214
                    C FOR FULL OFERATIONAL CAPABILITY!
                                                                                                                                         INFLPC
                                                                                                                                                         285
                                                                                                                                         INFUEC
                                                                                                                                                         2 66
                             ENTER A NEW QUADRUPLET IN "CSTABLE"/"CSTABEL"
(SFIF CLASS/EQUIPMENT CEPLCYMENT CTY) AND (ROTSE INV QTY)
                                                                                                                                         INFLEE
                                                                                                                                                         287
546
                                                                                                                                         INFLEC
                              00 295 II=1,5
CALL MCVE ( INF(5), II, CHAR2, 1, 1 )
IF ( CrAR2 .EQ. 1H ) GO TO 295
                                                                                                                                                         219
                                                                                                                                         INFLFC
                                                                                                                                         INFLEC
                                                                                                                                                         250
                                                                                                                                         INFLEC
                              J5 = J5 + 1
CALL MCVE (CHA#2,1,SAVE,J5,1)
545
                                                                                                                                         INFLFC
                                                                                                                                                         252
                                                                                                                                         INFUFC
                                                                                                                                                         2 53
                       295 CONTINUE
                                                                                                                                         INFUPC
                                                                                                                                         INFLEC
                                                                                                                                                         255
                              IF (J5.NE.u) GO TO 296
                                                                                                                                         INFUPE
                                                                                                                                                         256
                              CSTABLE (1+3) = G
                                                                                                                                         INFLFE
                                                                                                                                                         2 97
                              GO TO 257
                                                                                                                                         INFUPE
                                                                                                                                                         256
                                                                                                                                                         5 5 9
                                                                                                                                         INFLEE
                    C
                       296 CONTINUE
                                                                                                                                         INFUPE
                                                                                                                                                         300
                                                                                                                                         INFLEC
                                                                                                                                                         361
                              ENCOCE (4,376, FHT) J5
                                                                                                                                         INFLEC
545
                                                                                                                                                         362
                              DECODE (JS, FHT, SAVE) CSTABLE (1+3)
                                                                                                                                         INFLEC
                   C OO-LOOP 29% AND FOLLOWING COLE IS SIMILAR TO PRECEDING CODE;
C THE 9-CHARACTER REAL NUMBER FROM "INP"(6), STORED AS THE 4TH MEMBER
C OF A QUACKEPLET IN THE "GSTABLE" AFRAY IS (THAT QUANTITY OR FRACTICN
C OF ANY EPS ELEMENT WHICH MUST BE BOTH MANUFACTURED AND INSTALLED
C ON EACH UNIT OF A GIVEN SHIP CLASS)
                                                                                                                                         INFLET
                                                                                                                                                         364
                                                                                                                                         INFUPE
                                                                                                                                                         305
                                                                                                                                         INFLEC
563
                                                                                                                                         INFUFL
                                                                                                                                                         307
                                                                                                                                         INFUFC
                                                                                                                                                         348
                                                                                                                                         INFLEC
                                                                                                                                                         310
                       297 CONTINUE
                                                                                                                                         INF LFC
                                                                                                                                                         311
                              J6 = 0
J7 = 0
                                                                                                                                         INFUFC
                                                                                                                                                         312
                                                                                                                                         INFLFC
                                                                                                                                                         313
                              J8 = 0
                                                                                                                                         INFUPE
                                                                                                                                                         314
                              IPOINT = 0
                                                                                                                                         INFLEC
                              CHAR2 = CHAR1
                                                                                                                                         INFLPC
                                                                                                                                                         31£
                              00 298 11=1.9
576
                                                                                                                                         INFUFE
                                                                                                                                                         317
```

```
SUFFOUTING INFUPC
                                         74/74 CFT=2
                                                                                                             FTN +.0+433
                                                                                                                                              07/31/79 23.53.41
                                CALL MOVE (INP(6), II, CHARZ, 1, 1)
                                IF (CHAR2.60.1H ) GO TO 298
IF (CHAR2.60.1H.) IFOINT = IFOINT + 1
                                                                                                                                                  INFLFC
INFLFC
                                                                                                                                                                   319
                                                                                                                                                                   325
                                                                                                                                                  INFLEO
                                J8 = J8 + 1
                                IF (IP(INT.EQ.0) JE = J6 + 1
IF (IP(INT.EQ.1 .AND. (J8-J6).GT.1) J7 = J7 + 1
CALL MCVE (CHA*2,1,SAVE,J8,1)
                                                                                                                                                  INFLPC
                                                                                                                                                                   322
                                                                                                                                                  INFUFC
                                                                                                                                                                   323
                                                                                                                                                  INFLPC
                         298 CONTINUE
                                                                                                                                                  INFUFE
                                                                                                                                                                   325
                                IF (J8.NE..) GO TO 299
CST ABF L(I) = 0.
                                                                                                                                                  INFLEC
                                                                                                                                                                   326
                                                                                                                                                  INFLFE
                                                                                                                                                                   327
                                                                                                                                                  INFLEC
                                60 TO 26
                                                                                                                                                                   328
                         299 CONTINUE
                                                                                                                                                                   329
                                IF (IP(INT.EQ. 0) Jo = Jb + 1
                                                                                                                                                  INFLEC
                                                                                                                                                                   320
                                                                                                                                                  INFUPE
                                                                                                                                                                   331
                     C STOP 31 FREVENTS ABORT ON "FORMAT 377" OR "FHTR" FROE A ICO-LONG NOP INFLEC C IF STOP 31 EVER OCCURS, REVIEW INPUT, AND SHORTEN COMFORMIT COUNT(S) INFLEC C IN SECOND COLUMN (OF SYSTEM DESCRIFTION) TO 9 OR FEWER CHARACTERS! INFLEC C MOTER THE CHARACTER COUNT INCLUDES NUMBERS TO LEFT OF RIGHT OF DECIMAL INFLEC C POINT AND THE DECIMAL POINT: IF YOU HAVE A 9-DIGIT INTEGER INFLEC C (PERISH FORBID & HEAVEN FORBID!) THE PROGRAM LOGIC WILL SUFFLY INFLEC THE UNDERSTOOD DECIMAL POINT, INCREASING THE CHARACTER COUNT INFLEC TO 1L, AND CAUSING A STOP 31 CONDITION --- REDUCE TO 8-DIGITS! INFLEC
                                                                                                                                                                   133
                                                                                                                                                                   334
                                                                                                                                                                   3 25
                                                                                                                                                                   336
337
5 30
                                                                                                                                                                   339
                                                                                                                                                  INFLFE
                                                                                                                                                                   340
                                IF (JB.GT.9) STOP "INFUT HUMBER TCO LONG; SEE NOTE AT INFUFO 299"
                                                                                                                                                  INFLEC
                                IF (IPCINT.EO. 0) CALL MOVE (MYCOT, 1, SAVE, J8, 1) ENCODE (6,377, FMTR) 36,37 DECODE (J8, FMTR, SAVE) CSTAPEL(I)
                                                                                                                                                                   342
343
5 95
                                                                                                                                                  THELEC
                                                                                                                                                  INFLPC
                                                                                                                                                  INFLEC
                                GO TO 20
DATA CARD READ
                                                                                                                                                  INFLPC
                                                                                                                                                                   345
                                                                                                                                                  INFUFC
                      С
                                                                                                                                                                   340
                      C ** *
                                                                                                                                                  INFUFC
                                                                                                                                                                   347
                      C ** *
                                "NTYPE" = INCICATOR DURING SCAN OF 1ST 20 CHAR OF DETAIL
                                                                                                                                                  INFUED
                                                                                                                                                                   346
                      C ** *
                                                                                                                                                  INFUPD
                                                                                                                                                                   349
                                                 DATA CARD
                                   = C ONLY ELANKS SO FAR, OR JUST STARTING SCAN
= 1 JUST SCANNED 1ST LEFT PAFEN (PRESUMES SINGLE 48S EL)
= 2 JUST SCANNED FIRST DASH (PRESUMES MULTIFLE MES EL'S
                      C ** *
                                                                                                                                                  INFLFE
                                                                                                                                                                   350
                                                                                                                                                  INFUPE
                                                                                                                                                                   351
                                                                                                                                                   INFUFC
                      C ** *
                         304 1=0
                                                                                                                                                  INFLEC
                                                                                                                                                                   353
                                NTYPE = 1
                                                                                                                                                  INFUPE
                                                                                                                                                                   354
                                00 350 I=1,2;
                                                                                                                                                  INFUPC
                                CALL MCVE (INP,I,CHAR,1,1)

IF (NTYPE.GT.G) GO TO 310

IF (CHAR.EQ.1H() NTYPE = 1
                                                                                                                                                  INFLEC
                                                                                                                                                                   356
                                                                                                                                                  INFUPE
                                                                                                                                                                   357
61.
                                                                                                                                                  INFLEC
                                GO TO 3 !!
                                                                                                                                                  THELPE
                                                                                                                                                                   359
                               IF (CHAR.EQ. 1H ) GU TO 350
                                                                                                                                                  INFUFC
                                                                                                                                                                   360
                                                                                                                                                  INFUPE
                                IF (CHAR.GE. 1HO. AND. CHAR.LE. 1H9) GO TO 3-1
                                IF (CHAR. NE. 1H-) GC TC 320
£ 15
                                                                                                                                                  INFUFC
                                                                                                                                                                   3 € 2
                                IF (NTYPE.LE.2) GO TO 364
                                                                                                                                                  INFLPC
                                                                                                                                                                   3 E 3
                                "LOC" = FOSITION IN J-COUNT OF GASH.
                                                                                                                                                  INFLEC
                                                                                                                                                                   364
                               LOC = .+1
NTYPE = 2
                                                                                                                                                  INFLEC
                                                                                                                                                                   165
                                                                                                                                                  INFLFC
                                                                                                                                                                   366
                         GO TC 340
320 IF (CMAR.EQ.1H) ) GO TO 370
                                                                                                                                                  INFLPC
635
                                                                                                                                                                   3 E 7
                                                                                                                                                  INFUFE
                                                                                                                                                                   360
                     GO TO 161
C*** "3" = (GUNT OF LEGIT CHAR'S. TANY DIGIT OR DASH)
                                                                                                                                                  INFUPE
                                                                                                                                                                   369
                                                                                                                                                  INFLFE
                                                                                                                                                                  370
                                                                                                                                                  INFLEC
                                                                                                                                                                  371
                                CALL MOVE (CHAR, 1, SAVE, J. 1)
624
                     350 CONTINUE
                                                                                                                                                  INFUPE
                                                                                                                                                                  373
                                    OUTFUT ERROR MESSAGE
                                                                                                                                                  INFLEC
```

```
SUERGUTINE INFUPC
                                           14/74 CPT=2
                                                                                                                                                            37/31/79 23.53.41
                            363 WRITE (6.31) INP
                            MRITE(6,361)
361 FORMAT 19X, 26MPRELEDING CAPO IS IN ERROR )
                                                                                                                                                                                   376
377
                                                                                                                                                                 INFLPC
                                   GO TG 2B
                                                                                                                                                                 INFUEC
                        C TEST FOR A "DASH" NUT FULLOWED BY A SECUND SUBSCRIPT
                                                                                                                                                                 TAFUEC
                                                                                                                                                                 INFUFC
                           6 14
                                                                                                                                                                 THELPE
                                                                                                                                                                                   312
                                                                                                                                                                 INFLPC
                                                                                                                                                                 INFLET
                        C DECREMENT "J" & CHANGE "NTYPE" FOR DASH NOT FOLLOWED BY 2ND SUBSCRIPT
646
                                                                                                                                                                 INFUPE
                                                                                                                                                                 THEIRC
                            372 CONTINUE
                                                                                                                                                                 INFLEC
                                                                                                                                                                                   364
                                   J = J - 1
NTYPE = 1
                                                                                                                                                                 INFLEG
                                                                                                                                                                 INFUFE
                                         SINGLE SUBSCRIPT
€ 45
                                                                                                                                                                 INFUFE
                           374 CONTINUE
                                                                                                                                                                 INFLEO
                                                                                                                                                                                   3 43
                          374 CONTINUE
NUM = 1
ENCODE (4,376,FMT) J
PICK OFF WES ELLHENTS IN FIRST 10 CHAR'S.
37E FORMAT (2H(F,II,1H))
377 FORMAT (2H(F,II,1H.,II,1H))
OECOCE (J,FMT,SAVE) ISUBF
GO TO 390
SUBSCHIPT RANGE
                                                                                                                                                                 INFLEC
                                                                                                                                                                                   354
355
                                                                                                                                                                 INFUFE
                                                                                                                                                                 INFLFC
INFLFD
                                                                                                                                                                                   356
                                                                                                                                                                 INFLEE
                                                                                                                                                                 INFLEC
                                                                                                                                                                 INFLEC
                                                                                                                                                                 INFUFC
                                                                                                                                                                                   461
                           380 NOZ = J-LOL
NO1 = J-NO2-1
655
                                                                                                                                                                 INFLEC
                                                                                                                                                                 INFLAC
                                                                                                                                                                                   463
                           NO1 = J-NO2-1
ENCODE (10,385,FMT) NO1,NO2

385 FORMAT (2+(1,11,54,1x,1,11,14))
DECODE (J,FMT,SAVE) ISUBF, ISUBL
NUM = ISUEL-ISUEF+1

39) IF (SSF | AG.LT.C) GD TO +15
UPPATE SMIP CLASS/EQUIPMENT FILE RECORD

*** MOPKING WITH "TPUT" CUST LINE.

*** STORES UP TO 6 MBS EL'S. STORES "TPUT" COSTS ON MS 2 (A/N)

*** AT INDEX = 14,20,22,2TG OR STOKES "NPUT" AT INDEX = 19,

21,23,ETF.
                                                                                                                                                                 INFURE
                                                                                                                                                                                   465
ESC
                                                                                                                                                                 INFLEC
                                                                                                                                                                                   467
                                                                                                                                                                 INFLED
                                                                                                                                                                                   429
                        ....
                                                                                                                                                                INFLEC
61.5
                        C## #
                                   21.23,ctc.
INDEX = LOCAT + INC
CALL PEACHS (2.1GRCL, LENK, INDEX)
                                                                                                                                                                 TAFIEL
                                                                                                                                                                 INFIFE
                                                                                                                                                                                   415
                                   DO 419 I=1, NUM

IONFC(ISUBF+I-1) = INF(I+2)
                                                                                                                                                                                   416
                                                                                                                                                                INFLEC
INFUEC
676
                                                                                                                                                                                   417
                           IORFC(ISUEF+I-1) = INF(I+2)

41J CONTINLE
CALL HITMS (2,,CREC,LENK,INDEX,1)
GO TO 2U

UFOATE HBS OR SYSTEY DATA

400 HOTH H HBS EL "TPUT" PRICH TO FIRST "$ENC" OR

A "TPLT" COST LINE OF AN EQUIFPENT

415 IF (INC. EQ. 1) GO TO 43J

INDEX = 1XH9S + (ISU9F-1)/(LENF/F)

CALL BLANK 17 TABLE LENG TANDERS
                                                                                                                                                                 INFIRE
                                                                                                                                                                INFUFC
                                                                                                                                                                 INFLEC
                                                                                                                                                                INFUPE
INFLEC
INFLEC
                                   CALL PEACHS (2.ICREC,LENR, INDE );
ISUBL = POLIISUGF*5-4,LENR)
WRITING "APPROF COUL", "EL NAMES", AND ELFMENT NO. CA MS2.
                                                                                                                                                                 INFLAC
6 40
                                                                                                                                                                INFLIE INFUPE
                                                                                                                                                                                  427
                                   00 426 181.5
                                                                                                                                                                 INFLPC
                           +21 IOPEC(15U0L+1-1) = INF(2+1)
CALL MFITYS (2, LUREC, LL NR, INDEX, 1)
                                                                                                                                                                 INFLPE
                                                                                                                                                                                   430
```

FTN 4-0+433

```
FT# 4.6+433
                                                                                                                           67/31/79 23.53.41
    SUBPOLITING INFUPO
                                    74/74 GPT=2
6 85
                                                                                                                                             433
                                                                                                                              INFUFE
                                          DECODE RULL-UP VALUE
                  C
                                                                                                                              INFUFC
                                                                                                                                             434
                                                                                                                              INFLFE
                            CHAR2 = CHAR1
                                                                                                                              INFUFE
                                                                                                                                              436
                            00 425 II=1.2
CALL MCVE ( INF(8), II, CHAR2, 1, 1 )
IF ( CHAR2 .EQ. 1H ) GO TO 425
€ 90
                                                                                                                              INFLPC
                                                                                                                                             427
                                                                                                                              INFUFE
                                                                                                                              INFLEC
                                                                                                                                             434
                            J = J + 1
CALL MCVE ( CHARZ, 1, SAVE, J, 1 )
                                                                                                                              INFLEC
                                                                                                                                             441
                                                                                                                              INFUPE
                                                                                                                                             441
                                                                                                                               INFLEC
€ 35
                      425 CONTINUE
                                                                                                                              INFLEC
                                                                                                                                             443
                            ENCODE ( 4, 376, FMT ) J
DECODE ( J, FMT, SAVE ) IRCLL(ISUBF)
                                                                                                                              INFLFE
                                                                                                                                             444
                                                                                                                               INFLPC
                  C
                                                                                                                              INFLFE
                                                                                                                                             446
                                                                                                                              INFLPC
                                                                                                                                             447
                      GO TC 20
430 INDEX = 1XSD + (ISUBF-1)/LENR
7: :
                                                                                                                              INFUFC
                            CALL READMS (2,1CREG, LENG, INCEX)
CALL READMS (2,1DREC(LENR+1), LENR, INDEX+1)
                                                                                                                              TREUFF
                                                                                                                                             449
                                                                                                                              INFUFE
                                                                                                                                             450
                            00 440 I=1, NUM
                                                                                                                              INFUPC
                            NOX = MCG(ISUBF-1, LENR)
7.5
                                                                                                                              INFUFC
                                                                                                                                             452
                                                                                                                              INFLPC
                                                                                                                                             453
                      440 IOREC(NOX+I) = INP(1+2)
                            CALL WHITHS (2, ICRLC, LENR, INGEX, 1)
                                                                                                                               INFLEC
                            CALL WFITHS (2, ICRtC (LENR+1), LENR, INDEX+1,1)
                                                                                                                              INFUEC
                                                                                                                                             455
                                                                                                                              INFUFE
                            GO TC 20
                                                                                                                                             450
                                                                                                                               INFUFB
710
                  C-+----- END OF THE SYSTEM, MBS, EQUIPMENT NAME INFUT
                                                                                                                              INFLEE
                                                                                                                                             458
                                                                                                                              INFUFC
                                                                                                                                             459
                     500 CONTINUE
                                                                                                                                             464
                                                                                                                              INFUFC
                                                                                                                                             461
                     INITIALIZE PASS STORAGE FILES 9 % 10 IN THO OC-LOOPS.

NOTE: HS9 % HS10 EACH HAS A LOH ENC FROM 1 THROUGH 1247 (43 X 29);

ANC HS10 HAS A HIGH END FROM 1251 THROUGH LENF10.

LOH ENO CF HS 9 HOLDS UP TO 1247 "TOTC" AFFAYS FRCH "EUDGE!" SUBRTH,
715
                  C
                                                                                                                              INFLEC
                                                                                                                                             462
                                                                                                                              INFHER
                                                                                                                              INFUPE
                                                                                                                                             465
                     = SUMMARY TOTAL ARKAY OF 10 COSTS OVER ALL APPROPRIATIONS COGES FOR THIS "EQUI" ON THE "SHIP"

LOW ENG OF M310 MOLUS UP TO 1247 "ROW" ARRAYS FROM "SLCOM" RTN,

= TOTAL COSTS VERSUS M8S OF UP TO 29 "EQUI"S" ON EACH OF
                                                                                                                                             466
72;
                                                                                                                              INFLEC
                                                                                                                                             467
                                                                                                                              INFUFO
                                                                                                                                             4 6 16
                                                                                                                                             469
                            UP TO 43 "SHIP":
                                                                                                                              INFLEC
                                                                                                                                             470
                     HIGH END OF PS10 HULDS UP TO 43 "TO!" ARRAYS FROM "HESCUT(1)" SUERTN, = CROSS-FOCT ARRAY VERSUS NOS OF ALL "EQUI" COSTS ON A UNIT SHIP OF THIS CLASS.
                                                                                                                              INFLEC
                                                                                                                                             471
725
                                                                                                                              INFLFC
                                                                                                                                             473
                                                                                                                              INFUPE
                                                                                                                                             474
                            IOREC(L1) = C
                                                                                                                              INFUEL
                                                                                                                                             476
730
                     506 CONTINUE
                                                                                                                              INFLEC
                                                                                                                                             477
                            L3 = IFEC(1)
                           DO 507 L2=1,L3
CALL HFITMS (9,10REC,LENR9,L2,-1)
CALL HFITMS (10,10REC,LENK,L2,-1)
                                                                                                                              INFUEC
                                                                                                                                             479
                                                                                                                              INFLPC
                                                                                                                                             423
                                                                                                                              INFLPC
                     507 CONTINUE
7 35
                                                                                                                              INFLEC
                                                                                                                                             462
                            DO 508 L4=INGXTOT.LENF10
                                                                                                                              INFLEC
                                                                                                                                             413
                            CALL WEITHS (16, 10REC, LENR, L4,-1)
                                                                                                                              INFLEC
                                                                                                                                             484
                     508 CONTINUE
                                                                                                                              INFLPC
                                                                                                                                             425
                                                                                                                              INFLPC
                                                                                                                                             4 86
                  C START COMPONENT DEFINITION INPUT, TPUT, NELT, CEA
                                                                                                                              INFLEC
```

```
SCHPOUTINE INFUPO
                                  14/74 UFT=2
                                                                                           FT# 4.6+433
                                                                                                                       07/31/79 23.53.41
                  C ** *
                           HERE IMMEDIATELY AFTER STATEMENT "ZL".
                                                                                                                          INFUEC
                                                                                                                                        489
                                                                                                                           INFLEC
                                                                                                                                        450
                           ISPFLG = 1
                  С
                                                                                                                          INFLEC
                                                                                                                                        4 51
                                                                                                                          INFLEC
745
                                                                                                                                        452
                          READ IN ECUIPMENT DEFINITION DATA
                                                                                                                           INFLPC
                                                                                                                                        4 5 3
                    910 CONTINUE
READ (5.25) INF
                                                                                                                          INFUFC
                                                                                                                                        454
                                                                                                                          INFLPC
                                                                                                                                        495
                           IF ( ECF(51) 800, 923
                                                                                                                          INFLEC
                                                                                                                                        456
                                                                                                                          INFLPC
                                                                                                                                        457
750
                  c
                     920 CONTINUE
                                                                                                                           INFLFC
                           WRITE (E, 31) INP
                                                                                                                          INFUED
                                                                                                                                        449
                                                                                                                          INFLFC
                                                                                                                                        500
                          CELEMINE THE FIRST 4 CHARACTERS OF INP(1)
CALL MOVE ( INP(1), 1, CHAR, 1, 4 )
IF ( CHAR .EQ. 4HNPUT ) GO TO 970
IF ( CHAR .EQ. 4HTPUT ) GO TO 960
IF ( CHAR.EQ. 4HEQUI) GO TO 950
                                                                                                                          INFLFC
INFLFC
                                                                                                                                        561
755
                                                                                                                          INFLEC
                                                                                                                                        563
                                                                                                                          INFUPD
                                                                                                                                        5 i 4
5 i 5
                                                                                                                          INFLEC
                          IF ( CHAR .EQ. 4HEND ) GO TO 950

IF ( CHAR .EQ. 4HEND ) GO TO 1020

IF ( CHAR .EQ. 4HCER ) GO TO 980

CALL M(VE ( CHAR, 8, CHAR, 2, 3 )

IF ( CHAR .EQ. 1H* ) GO TO 910

IF ( CHAR .EQ. 1H* ) GO TO 910
                                                                                                                          INFUFC
                                                                                                                                        5 (6
750
                                                                                                                          INFLEC
                                                                                                                                        567
                                                                                                                          INFUFC
                                                                                                                          THEIPT
                                                                                                                                        5119
                                                                                                                          INFLEC
                                                                                                                                        510
                           GO TO 341
                                                                                                                          INFLEC
                                                                                                                                        511
765
                  С
                                                                                                                                        512
                  c
                                                                                                                           INFUPO
                              COMES HERE ON "EQUI"
                                                                                                                          TRELEC
                                                                                                                                        514
                     950 CONTINUE
                                                                                                                          INFUPC
                                                                                                                                        5 15
                  C
                                                                                                                          INFUPC
176
                              COUNTER OF TOTAL NO. OF DIFFERENT EQUIPMENT DEFINITION
                                                                                                                          INFUPO
                                                                                                                                        517
                  c
                          OATA INPUT
ICCTR = ICCTR + 1
                                                                                                                          INFLPC
                                                                                                                          TRELEC
                                                                                                                                        519
                  C
                                                                                                                          INFUFC
                              DEFINE THIS EQUIPMENT
                                                                                                                          INFUPC
                                                                                                                                        521
                  COMPRESS 1ST 6 LEFT JUST CHARACTER'S AS UNIQUE NAPE OF "EQUI"

CALL REFPT ( INP(2), NM, 2, 1HL )

FQUI = NM(1) .ANC. MASK
775
                                                                                                                          INFLEC
                                                                                                                                        522
                                                                                                                          INFLEC
                                                                                                                          THELEC
                                                                                                                                        524
                                                                                                                          INFLEC
                          DEFINE A LOCATION OR INDEX FOR STORAGE OF THIS EQUIPMENT
                                                                                                                                        526
527
                                                                                                                          INFLEC
                  č
                                                                                                                          INFLPC
                          LOCAT - MASS STORAGE 3 INDEX (18,20,22,ETC)
LOCAT = IXSSD + (ICCTR - 1) + 2
                                                                                                                          INFUFC
                                                                                                                          TAFLEC
                                                                                                                                        529
                  C
                                                                                                                          INFLEE
                                                                                                                                        530
                                        INCREMENT INDEX FOR CER STORAGE
                                                                                                                          INFLEE
                                                                                                                                        531
                  INDICER = INDICE + LENCEP

C "ICF" AFRAY IS THE TEMPORARY STORAGE FOR THE INCIGES OF THE C CER DATA FOR EQUIPMENT.
7 35
                                                                                                                          INFLEE
                                                                                                                          INFLEC
                                                                                                                                        533
                                                                                                                          THELPC
                                                - MASS STORAGE & INCEX (1,10,19,ETC)
                                                                                                                          TRELEC
                                                                                                                                        536
                           FILL "CER" TRIPLET WITH EQUIPES-8 INDEXPHS-3 (HS-2) INDEX
                                                                                                                          INFUED
                                                                                                                                        537
                           ISUBCER = ISUBCER + 1
ICER (ISUBCER) = EQUI
                                                                                                                          INFLPG
                                                                                                                          INFUFC
                                                                                                                                        539
                           ISUBCEF = ISUBCER + 1
ICER(ISUBCER) = INDCER
                                                                                                                          INFLEC
                                                                                                                                        540
                                                                                                                                       541
542
                                                                                                                          INFUFC
795
                           ISUBCER = ISUBCER + 1
                                                                                                                          INFLEC
                          ICER (ILUBULER) = LOCAT
SAVE 7 PLUS 7 CHIR'S AS "EQUI" NAME.
                                                                                                                          INFUPO
                                                                                                                                        543
                                                                                                                          TRELEC
                                                                                                                                        544
                           MAMESC (ICCTR.1) = INP(2) . AND. MASKT
                                                                                                                          INFLEC
                                                                                                                                        549
```

```
FTN 4.6+433
    SURROUTINE INFUPO
                                  74/74 UPT=2
                                                                                                                      27/31/79 23.53.+1
                          MAMESC (ICCTR, 2) = INP (3) . AND. MASKT
                                                                                                                         INFLPG
                                                                                                                                       5 46
                    IF (INF(4), EQ. 14H ) GC TO
GO TO $1;
955 NAMESC(ICCTR, 2) = NAMESC(ICCTR, 1)
                                                                                                                                       547
                                                               1 GC TO 955
                                                                                                                         INFLEC
                                                                                                                         INFUPC
                                                                                                                                       543
                                                                                                                         INFLPC
INFLPC
                                                                                                                                       549
550
                          NAMESCITCCTR, 1) = 16H
                                                                                                                         INFLEC
                          GO TO 913
                                                                                                                         INFUFC
                                                                                                                                       552
8 .5
                                                                                                                                       553
                                        THE INPUT VALUES ARE TPUT VALUES
                                                                                                                         INFLEC
                                                                                                                         INFLPC
                    963 CONTINUE
                          INC = .
GO TO 913
                                                                                                                         INFLFE
                                                                                                                                       555
                                                                                                                         INFUFC
                                                                                                                                       556
                                                                                                                         INFUFE
810
                                        THE INFUT VALUES ARE NPUT VALUES
                                                                                                                         INFUFC
                                                                                                                                       558
                                                                                                                         INPUPE
                    973 CONTINUE
                                                                                                                                       559
                                                                                                                         INFLEC
                          INC = 1
                                                                                                                                       5Eu
                                                                                                                                       5 £ 2
                          GO TC 919
                                                                                                                         INFUFC
                                                                                                                         INFUFC
815
                                        THE INPUT VALUES ARE CER VALUES
                                                                                                                         INPUPC
                                                                                                                                       5t i
                 C
                                                                                                                                       564
565
                    960 CONTINUE
                                                                                                                         INFUEC
                                                                                                                         INFLEC
                 C
                                        INITIALIZE CER INPUT COUNT CONTROL
                                                                                                                                       5 t 6
820
                          CEFCT = 1
                                                                                                                         INFLEC
                                                                                                                                       567
                  C
                                                                                                                         INFUPO
                                                                                                                                       SEB
                                                                                                                         INFLEC
                                                                                                                                       569
                    981 CONTINUE
                          READ (5, 983) CEREND, EFORSI, RCHID, ADDID, CERNO, XREFNO, XREFAD,
                                                                                                                         INFUPC
                                                                                                                                       573
                     C (FS(II),FS(II),II=1,6)
983 FORMAT (A5,A1,I3,I1,I5,I4,I1,6(A1,F9.0))
                                                                                                                         THELEC
                                                                                                                                       571
                                                                                                                         INFUPC
                                                                                                                                       572
8 25
                          INFUPC
                                                                                                                                       573
                                                                                                                         INFLPC
                                                                                                                                       574
                                                                                                                         INFLEC
                                                                                                                         INFUPE
INFUFO
                                                                                                                                       576
577
                          FORMAT (10x, A5, A1, I3, I1, I5, I4, I1, 6(1x, A1, F13, 6))
830
                          CERCT = CERCT + 1
IFORC(CERCT) = t FORSI
                                                                                                                         INFUPE
                                                                                                                                       570
                           IROMID (CERCT) = ROMID
IADO (CERCT) = ADDID
ICERNO (CERCT) = CENNO
                                                                                                                         INFLFC
INFLPC
                                                                                                                                       579
                                                                                                                                       5 (0
                                                                                                                         INFLEC
                                                                                                                                       5 (1
8 35
                           IXMEFNC(CERCT) = XEEFNO
                                                                                                                         INFUPE
                                                                                                                                       512
                                                                                                                         INFUFE
                           IXPEFAC (CERCT) = XKEFAO
                                                                                                                         INFUFC
                           00 984 I=1,6
                                                                                                                                       5 64
                           IFSTCRE(1, GERCT) = FS(1)
                                                                                                                         INFUPE
INFUPE
                                                                                                                                       5 65
                          PSSTORE (I, CERUT) = PS (I)
                                                                                                                                       5 (6
                                                                                                                         INFLEC
                                                                                                                                       5 17
                    984 CONTINUE
                          60 TC 981
                                                                                                                         INFUFC
                                                                                                                                       5 48
                                                                                                                         INFUPE
                                                                                                                                       5 19
                    985 CONTINUE
                                                                                                                         INFUPC
                                                                                                                                       591
                    985 CONTINUE
WRITE (6,936) LLKEND
986 FORMAT ( 10%, A5 )
CFFCIXE = CEKCI * 6
STORE "CER" UATA FOR THIS "EQUIP" ON MS 8 AT INDEX "INCCER"
CALL HEITMS (8,CERCT ,1 ,INCCER+1,1)
CALL HEITMS (8,IFORC ,CERCT ,INCCER+2,1)
CALL HEITMS (H,INGHIO ,CERCT ,INCCER+2,1)
CALL HEITMS (H,INGHIO ,CERCT ,INCCER+2,1)
                                                                                                                         INFLEC
                                                                                                                                       5 91
5 92
8 44
                                                                                                                         INFUPE
                                                                                                                                       5 %
5 %
                  C
                                                                                                                         INFLEC
                                                                                                                         INFLEC
                                                                                                                         INFIPE
                                                                                                                         INFLPC
INFLFC
                                                                                                                                       5 9 7
5 9 8
850
                           CALL WEITHS (8, IADO , CERCT CALL WEITHS (8, ICERNO , CERCT
                                                                    , INDCFR+3,1)
                                                                    .INCCER+4.1)
                                                                                                                         INFLED
                                                                                                                                       5 19
                                                                    ,INCCER+5,1)
                                                                                                                         INFLFE
INFLFE
                           CALL HEITHS (8. IXREFNG, CERCT
                                                                                                                                       600
                          CALL HEITHS (0, IXREFAD, CFRCT , INCCER+6,1)
CALL HEITHS (8, IFSTORE, CERCTX6, INCCER+7,1)
                                                                                                                                       601
955
                                                                                                                         INFLPO
```

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07/31/79 23.55.41
                                                                                 FTN + . E+433
   SUBROUTINE INPUPO 74/74 OPT=2
                       CALL WEITHS (6.PSSTORE, CEFCTX6.INDCFR+3.1)
                                                                                                             INFUPE
                                                                                                                         603
                                                                                                             INFLEC
                       GO TG 511
                                                                                                                         6 (4
                C
                                                                                                             INFLF(
                Ċ
                                    END OF THE EQUIPMENT DEFINITION DATA
                                                                                                             INFLPC
                                                                                                                         666
                                                                                                             INFUFC
                                                                                                                         627
REC
                C
                 1020 CENTINCE
                                                                                                             INFUFC
                       STORAGE OF EQUIPMENT TRUT/NPUT INCEX INTO THE "IREC" ARRAY N = IFEC(1) * 3
                                                                                                             INFUPE
                                                                                                                         619
                                                                                                             INFLEC
                C.
                                                                                                                         614
                                                                                                             INFUED
                       805
                                                                                                             INFUPE
                                                                                                                         612
                                                                                                             INFLEE
                                                                                                                         613
                                                                                                             INFLEC
                                                                                                            INFUFC
INFUFC
                                                                                                                         615
                                                                                                                         616
376
                                                                                                             INFLEC
                 1925 CONTINUE
                                                                                                             INFLEC
                                                                                                                         £ 18
                                                                                                             INFUPE
                 1936 CONTINLE
                                                                                                                         619
                С
                                                                                                             INFLEC
                                                                                                                         620
                       CALL WEITHS ( 2, IREC, LENEIT, IXSS, 1 )
                                                                                                                         6 c 1
6 2 2
                                                                                                            INFLEC
                                                                                                             INFUFC
275
                  501 FORMAT ( 2.13 )
                                                                                                             INFLEC
                                                                                                                         623
                 5u11 FORMAT ( 10x, 2013 )
                                                                                                             INFUFC
                                                                                                                         624
625
                                                                                                             INFUFC
                                     INPUT THE CHART GENERATION CONTROLS
                                                                                                             INFUPE
                                                                                                                         626
                       PEAD (5.25) INP
WRITE (6.31) INP
READ (5.501) CHRICHT
WRITE (6.5011) CHRICHT
                                                                                                             INFUFC
                                                                                                                         627
                                                                                                             INFLPC
                                                                                                                         628
                                                                                                             INFLEC
                                                                                                                         633
631
                                                                                                             INFLFO
                                                                                                             INFLEC
386
                Č
                                    INFUT TITLE AND SHIP INSTALLATION SCHEDULE
                                                                                                             INFLPE
                       READ (5.25) INF
WRITE (6.31) INF
                                                                                                             THELPC
                                                                                                                         633
                                                                                                                         634
                                                                                                             INFUPE
                C
                                                                                                             INFLEC
                                                                                                                         636
637
                       READ (5,5012) NOYRS, IYEARS
                                                                                                             INFUPC
                                                                                                             INFLEC
801
                        IYES = NCYKS + 1
                 50 12 FORMAT (15,6x,1215)
                                                                                                             INFLPC
                                                                                                                         638
                 HRITE(6,5013) NOVRS, (IYEARS(K), K=1,NOVRS)
5013 FORMAT(1ux, I4, * YEARS**, 1215)
                                                                                                             INFLEC
                                                                                                                         639
                                                                                                             INFUFC
                                                                                                                         640
                       00 502 I=1, NUS LA
                                                                                                             INFLEC
                       RFAU(5,5)3) (SINSTU(I,K),K=1,IYRS)
Write(6,504) (SINSTU(I,K), K=1,IYRS)
895
                                                                                                             INFLFC
                                                                                                                         642
                                                                                                             INFUPE
                                                                                                                         643
                   543 FORMAT (A6,4X,1215)
                                                                                                             INFLFC
                  504 FORMAT (10x, A6, 4x, 1215)

SNAME = SINSTU(1+1) .AND. MASK

SINSTB(I, 1) = SNAME
                                                                                                             INFLEC
                                                                                                                         645
                                                                                                             INFLFE
                                                                                                                         646
956
                                                                                                             INFUPE
                  582 CONTINUE
                                                                                                             INFLFC
                                                                                                                         648
                       READ (5.25) INP
                                                                                                             INFUPO
                       WRITE(6,31) INF
                                                                                                             INFLEC
                  601 FORMAT (1615)
                                                                                                             INFLEC
                                                                                                                         651
                  602 FOFMAT (13X,1615)
                                                                                                            INFUFC
9 ,5
                                                                                                                         652
                       READ (5,6)1) NOFLY
WRITF(6,6)2) NOFLY
READ (5,601) (IFLYROW(K), K=1,NOFLY)
WRITE (6,602) (IFLYROW(K), K=1,NOFLY)
                                                                                                             INFUFC
                                                                                                            INFLEC
                                                                                                                         654
                                                                                                            INFLEC
                                                                                                             INFLEC
                C READ IN FIVE LINES OF FUCTNOTES FOR CUTFUT CHARTS
915
                                                                                                             INFLEC
                                                                                                                         657
                       00 60 P=1,5
READ (5,25) (FN(TES(M,L),L=1,12)
                                                                                                            INFUFE
                                                                                                                         658
                                                                                                            INPUFC
                                                                                                                         659
```

```
67/31/79 23.53.41
    SUSFIGUTINE INFUPO
                                   14//4 OPT=2
                                                                                                      FT11 4.6+433
                             HPITE(6,644) (FNOTES(M,L),L=1,12)
                                                                                                                                       INFLFC
                                                                                                                                                       660
                        63 CONTINUE
                                                                                                                                       INFLEC
                                                                                                                                                       661
9 15
                       604 FORMAT (13X, 12A16)
                                                                                                                                       INFLFO
                                                                                                                                                       662
                      BUILD HCRKING FILE(3)

DO 505 I=1,Ltn#

505 IGREC(I) = 0
                                                                                                                                       INFUFC
INFUFC
                                                                                                                                                       663
                                                                                                                                                       664
                                                                                                                                       INFLEE
                                                                                                                                                       b € 5
                                                                                                                                                       666
667
                             CHAR = 10H
                                                                                                                                       INFLEC
                                                                                                                                       INFLEE
920
                   C DO-LOOP 51, INITIALIZES "LENF" (100) RECORDS ON MS3 TO ZERO
                                                                                                                                       INFUFC
                                                                                                                                       TNEUEC
                                                                                                                                                       669
                             00 518 I=1, LENF
                                                                                                                                       INFUFE
                                                                                                                                                       670
                      513 CALL HFITMS (3.) OREC. LENK. I.-1)
520 INDEX = IXHBS
INDX3 = 1
                                                                                                                                       INFLPC
525
                                                                                                                                       INFLEE
                                                                                                                                                       672
                                                                                                                                       INFLPC
                                                                                                                                                       673
                             NEEC = LHBS
                                                                                                                                       INFLEC
                             IGOTO = 3
GO TO 603
                                                                                                                                       INFUPE
                                                                                                                                                       675
                                                                                                                                       INFLEC
                                                                                                                                                       676
                      530 INDEX = 1XLD
INOX3 = LWBS + 1
                                                                                                                                       INFUFC
                                                                                                                                                       677
                                                                                                                                       INFLEC
                                                                                                                                                       678
                             NREC = LSD
IGOTC = 3
                                                                                                                                       INFUPC
                                                                                                                                       INFLIFE
                                                                                                                                                       6 60
                      GO TO EQJ
540 CALL READMS ( 2, IREC, LENRIT, IXSS )
                                                                                                                                       INFLEC
                                                                                                                                                       6 11
935
                             IGOTO = +
                                                                                                                                       INFLPE
                                                                                                                                                       6 (3
                             NCER = 3
NREC = 1
                                                                                                                                       INFLEC
                                                                                                                                                       684
                                                                                                                                                       6 15
                             IC = 0
                                                                                                                                       INFLPE
                                                                                                                                                       6 8 6
946
                       550 CONTINUE
                                                                                                                                       THELEC
                                                                                                                                                       6 17
                             IG = IC + 1
IF ( IC .GT. ICCTR ) GO TO 7)0
INDEX = ICER(NCER)
INDX3 = INDEX
                                                                                                                                       INFUPO
                                                                                                                                                       6 (8
                                                                                                                                       INFUFC
                                                                                                                                                       619
                                                                                                                                       INFLEE
                                                                                                                                                       694
945
                             NCER = NCER + 3
                                                                                                                                       INFUPE
                                                                                                                                       INFLEE
                                                                                                                                                       6 53
                   C DO-LOOP 66C AND INCLUDED (NESTED) CO-LOOPS:

C - READS "AS IS" INFUT RECORDS FROM MS2

C - TRANSLATES "AS IS" INTO "F-NOTATION" (F1.0 --- F10.0)

C ACCORDING TO THE NUMPER OF SIGNIFICANT CHAFACTERS

C (SUM UF DIGITS + DECIMAL PCINT + (MINUS))

C - HRITES "F-NOTATION" CATA ("IOFEC") CN MS3
                                                                                                                                       INFUPE
                                                                                                                                                       655
                                                                                                                                       INFUPE
                                                                                                                                                       6 56
953
                                                                                                                                       INFIRE
                                                                                                                                                       6 4
                                                                                                                                       INFLEE
                                                                                                                                                       6 19
                                                                                                                                       INFLEC
                      6 66 CONTINUE
                                                                                                                                       INFLPC
                                                                                                                                                       701
95,5
                             00 660 L=1.NFEC
                                                                                                                                       INFLPE
                                                                                                                                                       702
                             CALL FEADMS (2. TUREC, LENR, INDEX+L-1)
                                                                                                                                       INFLPE
                             00 650 L=1,LENR
IPER = 0
IBK = 0
INEG = 0
                                                                                                                                                      7 64
7 65
                                                                                                                                       TAFLEC
                                                                                                                                       INFLPO
                                                                                                                                       INFLEC
56
                                                                                                                                       INFUPO
                                                                                                                                                       767
                             NUM = C
                                                                                                                                       INFLED
                                                                                                                                                       768
                             DO 630 K=1,10
CALL MCVE (IOREL(J),K,CHAR,1,1)
IF (CHAR.NE.1H ) GO TO 610
                                                                                                                                       INFUPE
                                                                                                                                       INFUFO
                                                                                                                                                       7 10
                                                                                                                                       INFUPE
                                                                                                                                                      711
                      IF temarance in 7 00 10 020

IEK = IBK + 1

GO TC 630

610 IF (CHARANE 1H-) GO TO 615

IF (IPERANE 0) GO TO 656
                                                                                                                                       INFUFE
INFUFE
565
                                                                                                                                                      713
                                                                                                                                       INFUPD
                                                                                                                                                      714
                                                                                                                                       INFLPC
INFLFC
                             IPER = 1
                                                                                                                                                      716
```

| SUERO | UTINE INFU | PD ,4/74 0PT=2 | FTN +. 6+433 | u7/31/79 | 23.53.41 |
|-------|------------|--|--------------------|----------|----------|
| 976 | | GO TO 625 | | INFUFC | 7 17 |
| | 615 | IF (CHAR.NL.1H-) GO TO 620 | | INFLPE | 715 |
| | | IF (INEG.NE.L) GO TO 650 | | INFLPC | 719 |
| | | INEG = 1 | | INFUFE | 720 |
| | | GO TC 625 | | INFUPO | 721 |
| 575 | 6.20 | IF (CHAR.LT. 1Hu.OR.CHAR.GT.1H9) GO TO 650 | | INFLFC | 722 |
| | 625 | NUM = NUM + 1 | | INFLEC | 123 |
| | | CALL MCVE (CHAR, 1, SAVE, NUM, 1) | | INFLEC | 724 |
| | 630 | CONT INUE | | INFUPE | 7 25 |
| | | IF (IBK .EQ. 1u) GQ TQ 645 | | INFUFC | 726 |
| 5 7 0 | | ENCODE (7,64J, FHT) NUM | | INFUPC | 727 |
| | 640 | FORMAT (2H(F,12,3H.0)) | | INFLFC | 728 |
| | | DECOCE (NUM, FMT, SAVE) IOREC(J) | | INFLPC | 129 |
| | | GO TC LEV | | INFLFE | 723 |
| | 645 | IOFEC(J) = 0 | | INFLFC | 731 |
| 3.45 | 650 | CONTINUE | | INFUFC | 732 |
| | 660 | CALL WFITHS (3, IOREC, LENG, INOX3+L-1,1) | | INFUFC | 7 23 |
| | | GO TO 1520. 530. 540, 550), IGCTO | | INFUPC | 734 |
| | 700 | CONT INLE | | INFLFO | 7 35 |
| | C C | | | INFUPE | 736 |
| 996 | С | SETUP THE INORD ARRAY CENTAINING | APPRO. CODE. | INFIFE | 727 |
| | С | WES ELEMENT DEFINITION AND EQUATION I | NUMBER. | INFUFC | 738 |
| | | CALL AFCELM | | INFLFC | 7 29 |
| | | RETURN | | INFLEC | 740 |
| | 600 | CONTINUE | | INFUFO | 741 |
| 975 | | STOP "LNEXPECTED EUF AS INFUPD SUBRTH REAL | S DATA INPUT FILE" | INFUFC | 7 42 |
| | | END | | INFUFO | 743 |

```
67/31/79 23.53.41
  SUPPOULTER MR SOUT
                             74174
                                      UFT=2
                                                                              FTN 4.c+433
                     SUBROUTINE MESOUT (IGALL)
GENERAL TITLE TO BE USEC ON ALL CHARTS
COMMON / GENTLL / TITLE (3)
INTEGER TITLE
                                                                                                         WBSOUT
                                                                                                        GENTLE
                                                                                                         GENTLE
                                                                                                                       3
                                                                                                         GENTLE
                                                                                                        NELT
              KPLT
                                                                                                        NFLT
                                                                                                        KEU1
KPUT
                VARIOUS CIFER ARRAYS ARE EQUIVALENCED TO THE "ARAY" ARRAY AS IN:
                                                                                                        NPUT
                 - SECCH : RCW
                                      = ARAY(1.1)
10
                    BUDGET : CG
                                       = ARAY (1,2)
                                                                                                         NPL 1
                    INPUPC : TOREC = ARAY(1,1)
                                                                                                        MEUT
                                                                                                        NPUT
                    COMPCHP : ROW
                                      = ARAY (1.1)
                  - APCELM : IRAY = ARAY(1,1)
                                                                                                        NFLT
                                                                                                                      12
13
15
                                                                                                        NELT
                                          / ARAY(150.2)
                                                                                                        NPUT
                     COMMON / NEUT
                                                                                                         NFL 1
                                                                                                        MS 2
                MS Z
                                                                                                        MS 2
30
                                                                                                        MS 2
                                         - HASS STORAGE UNITS COMMON RECORD LENGTH
                                                                                                         MS2
                      LENR
                                         (TYPICALLY 150)

- NUMBER OF ELEMENTS IN THE COS (MAX 150)

- NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                                                                                                        MSZ
                                                                                                                       a
                       NWRS
                                                                                                         MS2
25
                       ICCTR
                                            ELEMENTS TABLE
                                                                                                        MS2
                                                                                                                      10
                                         - (150 MORCS) RECORD LENGTH OF 7 ARRAYS IN THE "CERVLS" COMMON
                                                                                                                      11
12
                      L150
                                                                                                        MS 2
                                                                                                         MSZ
                                            (930 WORDS) RECORD LENGTH OF 2 ARRAYS IN THE "CERVLS" COMMON
30
                                                                                                         MS2
                                                                                                                      14
15
              C
                                                                                                         MSZ
                      COMMON / MSZ / LENR, NHBS, I CGTR, L150, L190
                                                                                                         FS2
                                                                                                                      17
              c
                                                                                                         MS2
                                                                                                        M 5.2
                                                                                                                      18
35
                                                                                                        SYST
                 SYST
                                                                                                         SYST
                                         - NAME OF THE SYSTEM
                       NMSYS
                                                                                                        SYST
                                         - TOTAL NUMBER OF SHIPCLASSES CONSIDERED
- NAME OF THE SHIPCLASS IN TWO WORDS
- INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
                       NOSUE
٠ú
                       NMSUB ( , )
                                                                                                         SYST
                       NOGCHF( )
                                                                                                        SYSI
                                                                                                                       9
                       (FUNNING TOTAL FOR EQUIPMENTS)

NMCCHF( , , ) - NAIES OF EQUIPMENT (2 MCROS) FOR TITLES

IN MBSOUT (INDEXED BY EQUIPMENT NUMBER
                                                                                                         SYST
                                                                                                        SYST
                                                                                                        SYST
                                                                                                                      11
                                            AND SHIPCLASS NUMBERT
                                                                                                         SYST
                                         - NAMES OF EQUIPMENT (2 MORDS, 7 CHARS EACH)
FOR EQUIPMENT QUANTITIES TABLE - FLEET
                       NAMESCE , )
                                                                                                        SYST
                                                                                                        SYST
                                                                                                                      14
                                                                                                                      15
                                            SUMMARY
                                         - PRESENT EQUIFMENT (BEING PROCESSED)
- FRESENT SHIPCLASS (BEING PROCESSED)
                                                                                                                      16
د ر
                       EOUI
                                                                                                         SYSI
                       SHIFNE
                                                                                                        SYST
                                                                                                                      16
                                                                                                        SYST
                                NAMES / NMSYC, NOSLE, NMSUb(2,+3), NCCOHF(43), NMCOMP(2,100,43), NAMESC(114,2), EQUI, SHIFNM
                     COMMEN / NAMES
                                                                                                                      20
21
55
                      INTEGER EGUI.SHIFNM
                                                                                                        SYST
                                                                                                                      23
                                                                                                        SYST
```

```
14/74 OFT=2
                                                                                                                                         07/31/75 23.53.41
    SURPOUTING WESOUT
                                                                                                         FTN 4.6+433
                                                                                                                                            SYST
                                NAP
                                                        - COUNT OF DIFFERENT APPROPRIATION CODES
                                                                                                                                            SYST
                                                                                                                                                              25
                                APPRO ( )
                                                        - APPROPRIATION CODE NAMES
 ьb
                     С
                                                                                                                                            SYSI
                                                                                                                                                               26
                                                        - APPROPRIATION COOL NAMES
- PERCENTAGES FOR CBS ELEMENT COST SPLITS
- LOUNT OF THE LIFE CYCLE PHASES
- FIRST CBS ELEMENT NUMBER OF EACH PHASE
- UBS ELEMENT NUMBER FOR FAGE BEEAKS
(LAST CBS NUMBER FOR THE PAGE)
- TITLES OF CBS PHASES
                                SPCL( . )
                                                                                                                                            SYST
                    С
                                NPH
IFH( )
                                                                                                                                            SYST
                                                                                                                                                              28
                                                                                                                                                              29
                     C
                                                                                                                                            SYST
                                IPB( )
                                                                                                                                                              31
                                                                                                                                            SIST
 95
                                IPHASEL . )
                                                                                                                                            SYST
                                                                                                                                                              32
                     c
                                                        - FLEST (SYSTEM) SIZE
- LOWEST COST ELEMENT LEVEL TO BE PRINTED
(LOWEST LEVEL TO BE NOLLED UP HITMIN PHASE)
                                FLEETZ
                                NFOLL ( )
                                                                                                                                            SIST
                                                                                                                                                              34
                                                                                                                                                              25
                     C
                                                                                                                                            SYST
                                                           TOTAL RUTSE COST
TOTAL INVESTMENT COST MINUS TOTAL RIFOUT
TOTAL RIFOUT COST
                    Ċ
 7 b
                                ROTOT
                                TOTINV
                                                                                                                                            SAST
                                                                                                                                                              37
                     c
                                TOTPIF
                                                                                                                                                              38
                                                                                                                                            SYST
                                                           MISSILE ROTAL COST
HUMBER OF CBS ELLMENTS TO BE INCLUCED IN
FLYAMAY COSTS
                                SMISEC
                     c
                                NOFLY
                                                                                                                                            SIST
                                                                                                                                                               46
                                                                                                                                                              41
 7.5
                                                                                                                                            SYST
                     č
                                IFLYRCH( )
                                                           CBS ELEMENT NUMBER FOR FLYAWAY COSTS
                                                                                                                                             SYST
                                NOYES
                                                        - NUMBER OF YEARS IN SHIP INSTALLATION TABLE - YEARS COVERED BY THE SHIP INSTALLATION TABLE
                                                                                                                                            SYST
                                                                                                                                                               43
                                TYEARS
                                                                                                                                            SYST
                                                           NUMBER OF YEARS IN SHIP INSTALLATION TABLE
                                                                                                                                             SYST
                                IYRS
                                                        PLUS ONE (CCLUMNS FOR PHINTING SHIP/INST TABLE) - FUCTNOTES FOR FIRST THE MAJOR OUTPUT CHARTS
                                                                                                                                                              46
47
 a C
                                                                                                                                            SYST
                                FNOTES( . )
                     C
                                                                                                                                            SYST
                                                                                                                                             SYST
                              COMMEN / MISC / NAP, APPREIT), SPEC (3, E, 2), NPH, IPH (4), IPB (3),
                                                                                                                                            SYST
                                                                                                                                                              49
                                             IPHASE(2,4), FLEET 2, NRULL (4), RCTOT, TOTINV, TCTKIP, SMISRO, NOFLY, IFLY ROM (25), NOVRS, I YEARS(12), IYRS,
                                                                                                                                            SYS1
                                                                                                                                                              ٤ů
                                                                                                                                             SYST
 45
                                             FNGTES (5, 12)
                                                                                                                                            SYST
                              INTEGER APPRO. SPCL. FLEETZ
                                                                                                                                            SYST
                                                                                                                                                              53
                                                                                                                                            SYST
                    C
                                                                                                                                            SHIFINS
                                                                                                                                                                2
3
                        SHIFINS
 n,
                                                                                                                                            SHIFINS
                                                                                                                                            SHIFINS
                    C THE IPEC ARRAY IS A SINGLY-SUBSCRIPTED ARRAY WHOSE FIRST POSITION C IS THE TOTAL NUMBER OF UNIQUE SHIFCLASS/EQUIPHENT COPEINATIONS.
C THE NEXT THREE POSITIONS START A SERIES OF TRIPLETS WHOSE C MEMBERS ARE: SHIPCLASS NAME, EQUIPHENT NAME, MS 3 INDEX.
C IREC(1) - THE RUNNING SUM OF THE TOTAL NUMBER OF UNIQUE C SHIPCLASS/EQUIPMENT COMBINATION IN THE
                                                                                                                                            SHIFINS
                                                                                                                                            SHIFINS
 95
                                                                                                                                            SFIFINS
                                                                                                                                            SHIFINS
                                                                                                                                            SH1 FINS
                                                                                                                                            SEIPINS
                                                        EQUIPMENT LEVEL INFUT - THE NAME OF THE SHIP CLASS
                                                                                                                                            SHIJINS
                     C
                                                                                                                                                              12
                     Č
110
                                IREC(2,5,8,
                                                                                                                                            SHIFINS
                                11,ETC)
IFEC(3,6,9
                     С
                                                                                                                                            SHIFINS
                                                                                                                                                              14
15
                                                         - THE NAME OF THE EQUIPMENT
                                                                                                                                            SEIPINS
                                        12,ETC)
                                                                                                                                            SHIFINS
                                IREC(4,7,10
                                                         - INDEX FOR MASS STORAGE UNIT 3. AN INTEGER
                                                                                                                                            SHIFINS
                                                           THE STARTING LUCATION OF A RECORD (LENGTH)

THE STARTING LUCATION OF A RECORD (LENGTH)

THE STARTING LUCATION OF A RECORD (LENGTH)

THE STARTING LUCATION OF THE EQUIPMENTS
175
                                        13.ETC)
                                                                                                                                            SHIFINS
                                                                                                                                                              10
                                                                                                                                            SHIPINS
                                                                                                                                            SFIFINS
                                                                                                                                            SHIFINS
                                                                                                                                            SHIFINS
                                                            UN A UNIT SHIP (COMPLTED BY SUBROUTINE
110
                                                                                                                                            SHIFINS
                                                            COMPCMP1 .
                                                                                                                                            SHIFINS
                                                                                                                                                              24
                    Ċ
                                                                                                                                                              25
                                                                                                                                            SHIFINS
                              COMMON / MARRAY / IREC (3750)
                                                                                                                                            SHIFINS
                                                                                                                                                              26
                     С
                                                                                                                                            SHIFINS
```

| | SUEKOUTINE | ₩B \$ | aut | 14/74 | OFT | = 2 | FTN 4.6 | + 4 3 3 | 67/31/79 | 23.53.41 |
|-------|------------|-------|----------|----------|-------|---------------------------------|---|--------------|--------------------|------------|
| 115 | | | ** SHIFI | 12) 24 | IF SU | MHATICN AND INST | LLATION TABLE) COMA | CN ***** | SHIFINS | 28 |
| | (| | | | | | | | SHIFINS | 29 |
| | (| | SHIPS | UK() | - | | AL NUMBER OF UNIT S | | SHIFINS | 20 |
| | | : | | | | | FOLKO BY INSPECTION | CF | SHIFINS | 31 |
| | (| | | | | THE SHIP INSTAL | | | SHIFINS | 32 |
| 120 | | | SINST | E(,) | - | | ENT/INSTALLATION SC | HEUULL | SHIFINS | |
| | Ç | | | | | TABLE . FOR EACH | | | SHIFINS | 24 25 - |
| | (| | | | | | - SHIP CLASS NAME - THE YEARLY NUMBE | BC 0E | SHIFINS SHIFINS | 36 |
| | (| | | | | | | | SHIFINS | 37 |
| . 25 | | | | | | | TIPS OF THIS CLASS T DVINSTALLED | C 05 | SHIFINS | |
| 1 25 | , (| | CU150 | +() | _ | | OF UNIT SHIPS FOR | L ACH | SHIFINS | 29 |
| | (| | 30113 | , , | | | IS THE SAME COUNT A | | SHIFINS | 46 |
| | (| | | | | | I IT IS DEFINED IN | | SHIFINS | 41 |
| | (| | | | | | FTER ERROR-CHECKING | | SHIFINS | _ |
| 1 . | | | | | | SECURIS NESTED ! | | 714 | SHIFINS | 43 |
| 1 : . | | | | | | | ITAL COSTS BY SHIP J | 1455 | SHIFINS | 44 |
| | (| | | | | DETERMENT THE TE | 11 AE COS 13 DI 3111F 3 | £ 23 | SFIFINS | 45 |
| | , | • | COMMON | / SH1 | 24141 | / SHIESHMILED. ST | (NSTE(43,7), SHIFS#(| 4 2 8 | SHIFINS | 46 |
| | | | | | | SINSTB. SHIFSP | (431614347) 3417371 | 1.7 | SHIFINS | 47 |
| 1 35 | | | | | | |) CCMMON ******** | ***** | CITAE | 2 |
| • • • | , , | | | 031.50 | | 21 112117 GOANT 2 1 12. | Comon | | CSTAE | 3 |
| | (| | QCMFT | | - | QUANTITY OF FOUR | FMENT ALREADY DEPLO | YEG | CSTAB | , |
| | ò | | 40 | | | | L SHIPCLASSES (CL) | | CSTAE | 5 |
| | Č | | GCMFT | 2 | - | | PHENT TO BE MANUFAC | | CSTAB | 6 |
| 14. | | | 40 | • | | | THENT) OVER ALL SHI | | SALS | ž |
| • •• | i | | | | | (Q2) (REAL) | | | BAIZ | å |
| | è | | CSTAB | LE | - | | EO AKKAY WHOSE PEPB | ERS AFE | CSTAR | 9 |
| | · | | | | | A SERIES OF | | | CSTAE | 1. |
| | ō | | | | | SHIFCLAS | S NAME | | CSTAE | 11 |
| 145 | | | | | | | ANTITY OF EQUIPPENT | FOR EACH | CSTAE | 12 |
| | C | : | | | | | A PARTICULAR SHIFCL | | CSTAR | 13 |
| | (| ; | | | | INV GUAN | TITY OF EQUIPMENT F | CR EACH | CSTAE | 14 |
| | (| : | | | | SHIP ON | A PARTICULAR SHIPCL | ASS | CSTAB | 15 |
| | (| ; | | | | ITHESE THREE MEN | BEFS ARE GIVEN FOR | EACH | CSTAE | 16 |
| 1 = (| | ; | | | | SHIF CLASS MAKE | NG A SERIES OF CATA | TRIPLETS) | CSTAB | 17 |
| | | | | | | EVALUES ARE INTE | GE#) | | CSTAB | 16 |
| | (| | CSTAB | E L | - | SINGLY-DIMENSION | IEO AKPAY OF THE INV | ESTMENT | CSIAE | 19 |
| | (| | | | | | PMENT FOR EACH SHIF | | CSTAE | 20 |
| | (| | | | | | LASS. DATA ELEMENTS | | CSTAB | č1 |
| 155 | | | | | | | SAME SHIPULASS ORC | | SATED | 22 |
| | · | | | | | | O ARRAYS HAY BE THO | | CS148 | 23 |
| | (| | | | | OF AS A SERIES (| IF CATA CUADRUPLETS. | | CSTAR | 24 |
| | (| | | | | | | | CSTAB | 25 |
| | | ; | | | | | | | 84123 | έb |
| 1 = 0 | İ | | | | | | 11.CSTABLE (3750).CS | TABEL (1250) | CSTAE | 27 |
| | | | INTEGE | | | | | | CSTAR | 28 |
| | (| ; | | | | | S NUMBER, COST ELEM | FN1 10 | AFELOUT | 2 |
| | | | COMMEN | / 476 | LOUI | / [HORD(15),5) | | | APELOUT | 3 |
| | (| | | | | 44-16 (CO | | **** | CHAFTS | 2 |
| 1 4 5 | | | | | | TAKIS (CUNIKU() (| CHMON ********* | **** | CHARTS | 3 |
| | (| | | | | | | | CHAFTS | 4 |
| | (| | CHBIC | 1 T C/14 | TATHE | TH. MA 100 0117011 | CHAUT COLTRALS | | CHAFTS | 5 |
| | Č | | CHKIC | LUN | | THE HAJOR OUTPUT GENERATE CHART | CHART CONTRUCS | | CHA FTS CHA FTS | 7 |
| 170 | - | | | | | NO GENERATION OF | CHACT | | CHAITS | , |
| | , | | | | • | "O GENERALION OF | OT PRI | | CHAFTS | 9 |
| | • | | | | | | | | CHEFIA | 7 |

```
SCEROLTINE HOSCUT
                                 14/74
                                          14T=2
                                                                                        FTN 4.6+433
                                                                                                                  47/31/79 23.53.41
                 C
                          CHRICKI(1)
                                               - IF EQUAL TO 0 - CALLS MESOUT(1) FOR EQUIPMENT
                                                                                                                    CHAFTS
                                               - IF EQUAL TO C - CALLS MESOUT(1) FOR EQUIP
ELEMENT LIFE CYCLE COSTS - FLEET SUMMARY
- IF EQUAL TO C - CALLS MESOUT(2) FOR UNIT
SHIP COSTS BY EQUIPMENT (LEMENT
- IF NE. TO C - CALLS MESTOT RECAUSE
MESOUT(2) MAS NOT CALLED
                                                                                                                     CHAFTS
                 C
                                                                                                                                    11
                           CHRICKT (2)
                                                                                                                     CHAFTS
175
                                                                                                                     CHAFTS
                                                                                                                                    13
                                                                                                                    CHAFTS
                 С
                                                                                                                     CHEFTS
                                               - IF EQUAL TO J - CALLS MESOUT(3) FOR SHIP CLASS SUMMARY
                          CHRTCHT (3)
                                                                                                                     CHAFTS
                                                                                                                     CHAFTS
                                               - IF EQUAL TO G - CALLS BUDGOP FOR LIFE
                                                                                                                     CHAFTS
                          CHRICAT (4)
                                                  CYCLE COSTS BY BUNGET AFPROPRIATIONS
IF No. TO ] - CALLS POLCHT FOR CUTPUT BY
                                                                                                                    CHAFTS
                                                                                                                                    19
                                               - IF NE. TO J
                          CHRICKT (5)
                                                  KULL-UF NUMBER
                                                                                                                     CHAFTS
                                               - IF EQUAL TO 3 - LISTS THE SUBFLS ARRAY FOR ENTIRE CES FOR FROOFING
                          CHRTCAT (6)
                                                                                                                     CHAFTS
                                                                                                                     CHAFTS
                                                                                                                                    23
1 45
                                                                                                                     CHAFTS
                 C
                                                                                                                     CHAFTS
                                                                                                                                    25
                         COMMON / CHARTS / CHETCHT(15)
                                                                                                                     CHARTS
                                                                                                                                    26
                         INTEGER CHATENT
                                                                                                                     CHAFTS
                             AFRAY DEFINING THE POLL-OF INPUT NUMBERS, TOTAL COUNT OF COST ELEMENTS WITH SPECIFIC ROLL-OF NUMBERS TO BE CUTPUT,
                 С
                                                                                                                     ROLLPCT
130
                                                                                                                     RCLLFCT
                 C
                              ARRAY OF SELECTED HUS ELEMENTS NUMBERS. SELECTED ROLL-UP
                                                                                                                     HCL LFCT
                         OUTFUT FLAG
COMMEN / ROLUPCT /
                 C
                                                                                                                     FCLLFCT
                                                                                                                     ROLLFCT
                                                   IROLL(15a), RCLLTGT, ROLLSL(15u), ROLLFLG
195
                         INTEGER ROLLTOT, RULLSE, ROLLFLG
                                                                                                                     RCLLFGT
                                                                                                                     HCLLPCT
                   С
                                                                                                                     FCLLFCT
                                                                                                                     RULLPCT
                             MBSCUT MOUTINE COMPUTED VALUES, ARRAYS AND CONTROLS NEEDED
                                                                                                                     CUTENTS
                 C FOR THE CUT1 SUBFOUTINE
C KSC AFRAY -
210
                                                                                                                    BLICHTS
                                                 - SHIP NAMES
- OUTPUT COLUMN FLAG
                                                                                                                     CUTCHTS
                 c
                             IFLECL
                                                                                                                    OLICHTS
                                                    = 0 COMPS UR SHIFS LESS THAN 9
= 1 COMPS OR SHIPS GREATER THAN 9
                                                                                                                    OLICHIS
205
                                                    = 2 LAST SET
                                                                                                                    CUICNTS
                             IPG
                                                  - PAGING FLAC
- ENCOURE FORMAT 110
                                                                                                                    CUTCKTS
                             FFT11J ARRAY
                                                                                                                     CLTCHTS
                             FMT12J MRRAY
KPR AFRAY
KC, K1
                                                    ENCOCED FORMAT 120 COMPONENT OF SHIF NAMES FOR COLUMN HEADINGS
                                                                                                                     CUICNIS
                                                                                                                    OUTCHTS
                                                                                                                                   12
                                                 - INDICES FOR THE KAP ARRAY
- HOLLERITH CHARACTERS 'TOTAL'
- SUMMATION ARRAY FOR FINAL COSTS OF LITHER
                                                                                                                     CLICKIS
                             TTOTAL
                                                                                                                    OUTCNIS
                              TCT ARRAY
                                                                                                                     CLICKIS
                                                                                                                                    15
                                                  COMPONENTS OR SHIPS

- INDEX FOR THE AMORE ARRAY

- CENTAINS THE COSTS FOR ALL THE NAMES VALUES
                                                                                                                     OUTENTS
                                                                                                                    CUTCHTS
                                                                                                                                   17
                             ANDED ARRAY
215
                                                                                                                    CLICATS
                                                                                                                                    15
                                                    FOR AT MUST 10 COMPONENTS OR SHIFS
                                                                                                                     OUTCN15
                                                    KSC(2), IFLOCE, IPC, FMT113(14), FMT12: (4), KPP(20), KC, K1, ITOTAL, TOT (150), KCT, ANDHO(150,10)
                                                                                                                    CUTCHIS
                         COMMON / OUTCNTS /
                                                                                                                                    21
                                                                                                                    CLICKTS
22
                        3,FMT123(4),KNOAD(3),JNO4D(3),UNITFLY(4.),TGTUFLY,SHIFFLY(43)
                                                                                                                    CUICNIS
                                                                                                                                   23
                        4.TOTSHIP
                                                                                                                     CLICKIS
                                                                                                                    CENVLS
                 C ***** CEFVES (COST ESTIMATING RELATIONSHIP (CER) VALUES) COMMON ******
                                                                                                                    CERVES
2 ?!
                         THE CERVES COMMON CONTAINS EDEATIONS FOR STOWAGE OF THE CER
                 С
                                                                                                                    CEAVLS
                 C INFUT CARD COUNT, THE ROW ID'S, THE CEM EQUATION NUMEERS, THE C NOW CRUSS REFERENCE NUMBERS, THE INPUT PARAMETERS, THE AGCITION
                                                                                                                    CERNLS
                                                                                                                    CERVES
```

| | SUFFICE | WESCUT | 14/74 |) F T = 2 | | | FTN | 4 • € + 4 3 3 | 67/31/79 | 23.53.41 |
|-------|---------|---|-------------|------------------|---------------|----------|----------------|------------------------------|----------|----------|
| | | C ON CERS C | GNTACL. S | TURAGE ARRA | Y FOR LOU: | LPPENT | NAME, CLR | INCEX, | CÉHVLS | 9 |
| 233 | | | | ES FOR ALL | | | | | CENVLS | 10 |
| | | С | | | | | | | CERVLS | 11 |
| | | C CERC | T | - NUMBER | OF CER'S F | FOR TH | IS PARTICU | LAR EQUIFMENT | CERVES | 12 |
| | | c | | 040H 1) |) | | | | CERVLS | 13 |
| | | | iC () | - IF OR C |) ALPHAEET | MJ ÇIN | AFACTER IN | CICATING | C[FVLS | 14 |
| 235 | | C | | | OK CER | | 150 HORDS1 | | CERVLS | 15 |
| | | C IROH | 110 | | | EF TO | MHICH THIS | CER AFPLIES | CENVLS | 16 |
| | | C | | (15 J HO | | | | | CENVLS | 17 |
| | | C IADO |) | | | | HRU 6) FOR | | CETVES | 18 |
| | | C | | | | | | NO ADDING. | CERVES | 19 |
| 240 | | C | | _ | | AUU | UP SUBELEM | FM12. | CERVES | 20 |
| | | C | | (15J WO | | 505.6 | | NC Th THE | CERVES | 21 |
| | | C ICER | NC | | | | ER EQUATIO | | CENVLS | 22 |
| | | C . | | | P' SUERGU' | | 1150 WORD | | CERVLS | 23 24 |
| 3 | | C IXRE C | 1110 | | | | | REFERENCING T. AT FRESENT | | 25 |
| 245 | | | | | | | ER 8 ALLCH | | CERVES | 26 |
| | | C L | | KEFEKEN | | | ATES NO LA | | CERVES | 27 |
| | | C C | | (15 HO | | 1 1010 | A ICS NO CT | 033-KEF. | CENVLS | 28 |
| | | C IXRE | E 40 | | | Ent | CROSS - KF F F | LEACTUG | CERVES | 29 |
| 250 | | C | | | - ELEMENTS. | | | KERCING | CEAVES | 30 |
| 2 3 0 | | Č IFST | OSE | | | | TERS. (940 | WOREST | CERVES | 31 |
| | | C PSST | | | | | METERS. (9 | | CENVLS | 32 |
| | | C ICER | _ | | | | RRAY CONTA | | CEFVLS | 33 |
| | | C | . , | | | | | SE MEMBEFS | CERVLS | 34 |
| 255 | | č | | AREI | | | | | CERVES | 35 |
| | | | £ + (1,4,7, | | NT NAME | | | | CERVLS | 36 |
| | | i II | ETC) | | • • • • • • • | | | | CERVLS | 37 |
| | | 0.1 | Ex (2,4,6 | - INDEX F | OR MASS ST | OR A CF. | UNIT 6. | INDEX | CERVLS | 38 |
| | | C | ETCI | BEGINS | AT 1 AND 1 | NCELH | ENTS BY 9 | (1,13,19, | CERVES | 29 |
| 260 | ; | C | | ETG). T | HE FOLLOW: | ING CA | TA RECORDS | ARE | CEHVLS | 40 |
| | 1 | C | | INDEXED | ı | | | | CERVLS | 41 |
| | | С | | 1 (| CERCT | 6 | IXREFNO | | CERVLS | 42 |
| | | C | | _ | IFORC | 7 | IXREFAO | | CERVLS | 43 |
| | | c | | _ | IKOHIC | 8 | IFSTORE | | CERVLS | 44 |
| ₹ € 5 | | С | | | I AOO | 9 | FS.STORE | | CERVLS | 45 |
| | | ί _ | | | ICERNO | | | | CERVLS | 46 |
| | | | E F (3,6,9 | | | | UNIT 2 AN | | CENVLS | 47 |
| | | C | | | | | INCKEHENT | | CERVES | 46 |
| | | <u>c</u> | | | | | IDENTICAL | | CERVLS | 49 |
| 27. | | C | | | | JAIA II | RIPLET STO | KEO IN | CERVES | 50 |
| | | C CHAF | | | C AFRAY. | - 4410 | HEO ARKAY | PETCH TO | CERVES | 51 52 |
| | | u SUBE C | FE(*) | | CNE-TO-ON | | | WLICH TO | CERVLS | 53 |
| | | C C | | | | | HIN 'CUMFC | HC L AND | CENVLS | 54 |
| 2.79 | | Ċ | | | | | STORAGE UF | | CEHVLS | 55 |
| | | C | | | | | UPUT, AND | | CENVLS | £6 |
| | | C | | VALUE | FOR EACH | | | I TOTAL | CENVLS | 57 |
| | | | 08() | | | | R OF UNF C | R MORE | CERVES | 56 |
| | | · • • • • • • • • • • • • • • • • • • • | | CEKS. | / 11 | | | | CERVES | 59 |
| 2 8 0 | | C | | 0511.38 | | | | | CENVLS | έi |
| • • • | | C C | | | | | | | CERVLS | ę1 |
| | , | - | N ZCERVIS | LEKLT. IF | 06041501- | TROWT | D (150). TA | 00(150). | CERVES | 62 |
| | | c | , | | | |),IXREFAD | | CERVES | €3 |
| | | ž | | | | | 6,150),ICE | | CERVLS | 64 |
| 5 + 5 | 5 | č | | | 150), FACT | | | • | CERVES | €5 |

```
TUDEROLTINE WESOUT
                             74/74 OPT=2
                                                                                     FTN 4.6+433
                                                                                                                U7/31/79 23.53.41
                         INTEGER CERCT
                                                                                                                   CEFVES
                                                                                                                                  €7
                    CENVLS
                                                                                                                                  Éø
                                                                                                                   CERVLS
290
                         CIMENSION ELANX(20)
                                                                                                                                  15
                         INTEGER SVIEND, BLANX, ASMOTES
                                                                                                                   HESOUT
                 CCC
                                                                                                                   k8SCUT
                                                                                                                                  17
                                INCXTOT IS THE STARTING INDEX FOR STORAGE OF THE SHIP
                                                                                                                   HESOUT
                                                                                                                                  18
                         ILLAID IS THE STARTING INC

SUMPATIONS ON UNIT 10

DATA INDXTOT / 1251 /

DATA (ELANX(L),L=1,2)) / 20*10+

ITOTAL = "H TOTAL
                                                                                                                                  19
                                                                                                                   WESCUT
295
                                                                                                                   KESOUT
                                                                                                                   RESCUT
                                                                                                                   WBSCUT
                                                                                                                                  22
                         MASK4 = 777777770000000000008
ASMOTES = 10HASMO MODEL
                                                                                                                                  23
                                                                                                                                  24
25
                                                                                                                   WBSCUT
                          IF (ICALL. £2.3) GO TO 203
                                                                                                                   MBSOUT
                 C COUTPUT BY SHIP CLASS (OR FLEET) FOR ALL EQUIPMENTS
                                                                                                                                  26
27
                                                                                                                   WESCUT
                                                                                                                   MESCUT
                                                                                                                   MBSCUT
                                                                                                                                  29
30
                                                                                                                   WESCUT
                         ING = 3
IPH2 = IFH(2)
NMBSM1 = NMBS - 1
IPH2M1 = IFH(2) - 1
IPHL = IFH(NPH)
3,5
                                                                                                                   HBSCUT
                                                                                                                   MBSCUT
MBSCUT
                                                                                                                                  31
                                                                                                                                  32
33
                                                                                                                   HBSCUT
                                                                                                                   MESOUT
                                                                                                                                  34
35
311
                         IF (ICALL.EC.1) GO TO 103
                                                                                                                   RESCUT
                 c
                                                                                                                   MASOUT
                                                                                                                                  36
37
                                      LOOP THROUGH ALL STIFS
                                                                                                                   MBSCUT
                         DO 95 ISUES=1,NOSUB
                                                                                                                   WBSOUT
WBSCUT
                                                                                                                                  38
                 С
                         TOISHIF = J.W
SETUP INDEX RETRIEVAL
IBEG = ICOMP(ISUBS) * 3 + 1
315
                                                                                                                   HBSOUT
                 C
                                                                                                                   RESCUT
                                                                                                                   WESOUT
                         JEED = IBEG + (NUM-1)+3
JEEGX = IBEG
                                                                                                                   KBSOUT
                                                                                                                                  43
                                                                                                                   WESCUT
                                                                                                                                  44
45
326
                                                                                                                   MBSCUT
                 c
                                                                                                                   HBSOUT
                                                                                                                                  46
                         CALL FLEMT ( NMSUB(1. ISUBS), KSC(1), 2, 1FR )
                                                                                                                   HBSOUT
                 С
                                                                                                                                 48
                                                                                                                   BESCUT
                         00 15 J=1,NWBS
f0T(J) = 0.0
                                                                                                                   HBSCU)
125
                                                                                                                                 50
51
                                                                                                                   WBSCUT
                     15 CONTINUE
                                                                                                                   MESCUT
                00000
                                                                                                                   FESCUT
                          IFLGCL (FLAG HORD) - = 0 EQUIP AND SHIP LESS THAN 9
= 1 EQUIP AND SHIP GREATER THAN 9
= 2 LAST SIT
                                                                                                                   WESCUT
                                                                                                                                 53
                                                                                                                   PBSCLT
                                                                                                                                 54
33.
                                                                                                                   WESCUT
                                                                                                                                 56
                         IPG = G
FOLLFLC = D
                                                                                                                   HBSCUT
                                                                                                                   #BSCUT
                                                                                                                                 50
                         IFLGCL = 0

IS1 = 1

IS2 = PUM

NCOL = NUM + 1

NNUM = NUM
                                                                                                                   ME & CUT
                                                                                                                   HESCUT
                                                                                                                                 ĒĢ
                                                                                                                   MBSOUT
                                                                                                                                 € 2
                                                                                                                   h65CUT
                                                                                                                                 €3
                         IF ( NCOL .LC. 10 ) GO TO 20
                                                                                                                   WESCUT
                 С
                                                                                                                   WESCUT
                                                                                                                                 65
                         NCOL = 11
NNUM = 13
                                                                                                                   WBSOUT
                                                                                                                                 £6
                                                                                                                   MESCUT
```

AL CANADA

```
07/51/79 23.53.41
     SCERULTINE HBSOUT
                                         :4/74 OFT=2
                                IS2 = 13
                                                                                                                                                  MESCLT
                                IFLGCL = 1
SVIENO = IENO
                                                                                                                                                  WESOUT
                                                                                                                                                                     69
                                                                                                                                                  RESCUT
345
                                                                                                                                                  WESCUT
                                                                                                                                                                    71
72
                                IEND = 18EG + 27
                                                                                                                                                  #ESCUT
                     C
                     TEST TO SEE IF EXACTLY 10 EQUIFMENTS ARE TO BE OUTPUT.

C IF YES, THEN DECREASE TO 9 SO THAT ONE HILL AFPEAR ALONG WITH

C THE "TOTAL" ON THE NEXT SET OF OUTPUT.

IF ( NEW .NE. 16 ) GO TO 20
                                                                                                                                                  MUSCUT
                                                                                                                                                                    74
75
                                                                                                                                                  MBSCUT
350
                                                                                                                                                  WESCLT
                                                                                                                                                  MBSCUT
                                NCOL = 9
NNUM = 9
                                                                                                                                                  WESCUT
                                                                                                                                                                    77
                                                                                                                                                  HBSCUT
                                                                                                                                                  MESCUT
MESCUT
                                                                                                                                                                    £0
£1
355
                                IENO = IECG + 24
                     С
                           20 CONTINUE
                                                                                                                                                  wes cut
                                                                                                                                                  KBSCUT
KBSCUT
                                                                                                                                                                    €3
€4
                     C
                           22 CONTINUE
                               LONIANCE

NSP = 50/NCOL - 8

NSPP1 = NSP + 1

ENCOCE (120,111,FMT110) NN(M,NSFP1,NGCL,NSPP1,NCOL,NSF
ENCOCE (40,122,FMT120) NGOL,NSP
ENCOCE (40,123,FNT1231 NGCL,NSP
CONTINIE
                                                                                                                                                  HESCUT
                                                                                                                                                                     25
                                                                                                                                                                    66
67
                                                                                                                                                  WBSCUT
                                                                                                                                                  FESCUT
                                                                                                                                                  MUSCUT
                                                                                                                                                  WESCUT
                                                                                                                                                                    63
60
                           23 CONTINUE
                                                                                                                                                  RESCUT
305
                              IF ((TITLE.AND.MASK4) .EQ. (ASMDTES.ANC.MASK4))
C ENCODE (40,121,FMT120) NGOL,NSP
                                                                                                                                                  KBSCUT
                                                                                                                                                  MESCUT
                                                                                                                                                                     52
                                                                                                                                                  WESCUT
                                                                                                                                                                     93
                                                                                                                                                  WBSCUT
                         00 107 K6=1,43
107 SHIPFLY(K6) = 0.0
370
                                                                                                                                                  N850UT
                                                                                                                                                                     95
                                                                                                                                                                     96
                                                                                                                                                  MESCUT
                                LO 40 J=IBEG, IENO, INC
CAL! REAGHS ( 3, ARAY, LENR, IREC(J) )
KCT = RCT + 1
                                                                                                                                                  HBSCUT
                                                                                                                                                                     ç7
                                                                                                                                                  RESCUT
                                                                                                                                                                     ٩a
                                                                                                                                                  WESCUT
                                                                                                                                                                     çğ
375
                     С
                                                                                                                                                  WESCUT
                                                                                                                                                                   180
                               IDxCS3 = JEEGX - 1
IDxCS4 = IDxCS3/3
CSI3 = FLOAT(CSTABLE(IDxCS3))
CSI4 = CSTABEL(IDxCS4)
                                                                                                                                                  KRSCUT
                                                                                                                                                                   101
                                                                                                                                                  MBSCUT
                                                                                                                                                  WBSCUT
                                                                                                                                                                   103
                                                                                                                                                  MESCUT
                                                                                                                                                                   114
                                AHORO(NHSS,KCT) = 0.0
                                                                                                                                                  WESCUT
                                                                                                                                                                   105
                               TO 30 I=1, NMBSM1

IF (NF+.E0.2) GU TU 2+

IF (ILT.IFHL) GO TO 2+

AMORDII, KCT) = AMAY(I.1) * CST3
                                                                                                                                                                  166
                                                                                                                                                  MBSCUT
                                                                                                                                                  MESOUT
                                                                                                                                                  HESCUT
                                                                                                                                                                  158
                                                                                                                                                  WESCUT
                                                                                                                                                                   109
                               GO TO 26
AHORD(1, HCT) = ARAY(1,1) * CST4
1:5
                                                                                                                                                  MBSCUT
                                                                                                                                                                   113
                                                                                                                                                  Mascut
                                                                                                                                                                   111
                           26 TOT([] = TOT([) + AMORD([,KCT)
DO 127 K2=1,HOFLY
                                                                                                                                                  WESCUT
                                                                                                                                                                  112
                                                                                                                                                  WESCUT
                                                                                                                                                                  113
                                IFII.NE. IFLYKOWIK21) GO TO 127
                                                                                                                                                  MBSCUT
                                SHIPFLY(KCI) = SHIPFLY(KCI) + AHORD(I,KCI)
IF(K2.FQ.NUFLY) TOISHIP = TOISHIP + SHIFFLY(KCI)
WRITE(E, 2JL) SHIPFLY(KCI),TOISHIP
34:
                                                                                                                                                  WBSCUT
                                                                                                                                                                  115
                                                                                                                                                  HESCUT
                                                                                                                                                                  116
                                                                                                                                                  NES (UT
                                                                                                                                                                  117
                        127 CONTINUE
                                                                                                                                                  KBSCUT
                                                                                                                                                                  115
                           30 CONTINUE
                                                                                                                                                  HESCLT
                                                                                                                                                                  119
3 95
                                                                                                                                                  HESCUT
                                                                                                                                                                  126
                               ANGRC (NMBS, XLT) = ANGRO (1, XCT) + ANGRO (1FH2, XCT) + ANGRO (1FHL, )CT) NBS CUT
TOT (NMBS) = TOT(1) + TUT(1FH2) + TOT(1PHL)

JBLGX = JBLGX + 3

IF (1PFL,GT,1PH2) GO TO 4U

NBS CUT
                                                                                                                                                                  121
                                                                                                                                                                  122
                                                                                                                                                                   123
```

```
SUEROUTINE WESOUT
                            74/74 CFT=2
                                                                           FTN +. 6+433
                                                                                                  L7/31/79 23.53.41
                      AHORD (NHBS, KLT) = AHURO (NHBS, KCT) - AHORU (IFHL, KCT)
                                                                                                    HESCUT
                                                                                                                125
4.0
                      TOT (NHES) = TOT (NHBS) - TOT (IPHL)
                                                                                                    MBSOUT
                                                                                                                126
                  40 CONTINUE
                                                                                                    HESCUT
                                                                                                    HESCUT
                                                                                                                120
              С
                                                                                                                129
                      KC = 0
                                                                                                    WESCUT
                      DO 5. I1=IS1, IS2

KC = KC + 1

KPR(KC) = NHCCHP(1, I1, ISUBS)
                                                                                                    MESCUT
4.15
                                                                                                    HESCUT
                                                                                                                1 2 2
                                                                                                    MESCUT
                      K1 = KE + 1U
KPR(K1) = AMCOMP(2, I1, ISUBS)
                                                                                                    WBSCUT
                                                                                                                134
135
                                                                                                    MESCUT
                  50 CONTINLE
                                                                                                     wBS (UT
               c
                                                                                                    MBSCUT
                                                                                                                136
                                                                                                    HBSCUT
               C
                      GENERATE CUTPUT FOR ALL CBS COST ELEMENTS FOR "K" NUMBER
                                                                                                    MASCUT
                                                                                                                136
               C OF EQUIPPENTS
                                                                                                    MBSCUT
4:5
                                                                                                    WESCUT
                                                                                                                140
                                                                                                    WESCUT
                                                                                                                141
                      CALL OLT! (ICALL)
                                                                                                    MBSCUT
                                                                                                                142
                                                                                                                143
                                                                                                    hBSCUT
                 144
                                                                                                    WBSCUT
426
               C
                                                                                                    MESCUT
                      CHECK FOR END OF THIS SHIP'S EQUIPMENTS
                                                                                                    MBSCUT
                                                                                                                146
               C
                                                                                                    NOSCUT
                                                                                                                147
               C
                                                                                                    WASCUT
                                                                                                                148
                                                                                                                149
                  80 CONTINUE
                                                                                                    WBSCUT
425
               C
                                                                                                    MBSCUT
                                                                                                                150
                                                                                                                151
               C.
                                                                                                    MBSOUT
                                                                                                    HESCUT
                  85 CONTINUE
                      IF (IFLGCL.NE.1) GU TO 90 IPG = 0
                                                                                                    HESCUT
                                                                                                                153
                                                                                                    KBSCUT
                                                                                                                154
                      IS1 = IS2 + 1
                                                                                                                155
430
                                                                                                    HBSGUT
                      IS2 = IS2 + 10
                                                                                                    HESCUT
                                                                                                                156
                     IF (152.EQ.NUM .AND. (MOD(152.10)).EQ.J) IS2 = IS2 - 1
IF (152.GT.NUM) IS2 = NUM
NCOL = IS2 - IS1 + 1
IF (152.EQ.NUM) NCOL = NCOL + 1
                                                                                                    MBSCUT
                                                                                                                157
                                                                                                    MBSCUT
                                                                                                                158
                                                                                                    WESCUT
                                                                                                                159
                                                                                                                1 (0
435
                                                                                                    MESOUT
                      NNUM = NCOL
                                                                                                    WBSCUT
                                                                                                                1 (1
                      IF (ISE.EQ.NUM) NNUM = NNUM - 1
                                                                                                    MBSOUT
                                                                                                                162
                      IBCG = IENC + 3
IENO = IBEG + ((IS2 - IS1) + 3)
                                                                                                    MBSCUT
                                                                                                                163
                                                                                                    WESOUT
                                                                                                                164
                      IF (ISZ.EC.NUM) IFLGCL = 2
                                                                                                    KBSCUT
                      GO TO 28
                                                                                                                160
167
                                                                                                    MBSCUT
                                                                                                    RESCUT
                                 OUTPUT TOTALS FOR THIS SHIP
                                                                                                    MESCUT
                                                                                                                1 68
              С
                                                                                                    MBSCUT
                                                                                                                1 (9
445
                  93 CONTINUE
                                                                                                    MBSOUT
                                                                                                                170
                      INDX = INDXTOT + ISUBS - 1
CALL WHITMS ( 10 , TOT , NWBS, INDX )
                                                                                                    HESCUT
                                                                                                                171
                                                                                                    WBS CUT
                                                                                                                172
               C
                                                                                                    MASCUT
                  95 CONTINUE
                                                                                                    HBSCUT
              C
456
                                                                                                                1 75
                                                                                                    No SCUT
                      RETURN
                                                                                                    MBSCUT
                                                                                                                176
               С
                                                                                                    WBSCUT
                                                                                                                177
                                          LEVEL
                           FLEET
                                                          0 U T P U T - - -
              С
                                                                                                    WASCUT
                                                                                                                178
               C
                                                                                                    MESCUT
                                                                                                                179
455
                      LOOP THROUGH ALL EQUIPMENTS 10 AT A TIME AND LIST COSTS FOR
                                                                                                    HBSCUT
                                                                                                                160
               C THE TOTAL NUMBER OF EACH EQUIPMENT ACROSS THE CBS.
                                                                                                    MESCUT
                                                                                                                121
```

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SURFOLLINE WESOUT
                                  ~4/74
                                                                                                                    C7/31/79 23.53.41
                                             OPT=2
                                                                                         FTN 4.6+433
                                                                                                                      WESCUT
                    100 CONTINUE
                                                                                                                      HESCUT
                                                                                                                                    183
                    00 103 IT=1,NWBS
                                                                                                                      MBSCUT
                                                                                                                                    1 84
460
                                                                                                                      RESCUT
                                                                                                                                    185
                                                                                                                      WESCUT
                  C THE FOLLCHING LOGIC SETS UP RECOVERY INDICES FOR COMMEN ARRAYS C AND MASS STORAGE FILES, AND ALSO COLUMN & SPACING COUNTERS FOR C ENCODING OLTPUT FORMATS AND COUNTING CUTPUT ARRAY COLUMNS:
                                                                                                                       wBSCUT
                                                                                                                                    167
                                                                                                                      WBSCUT
                                                                                                                                    188
                                                                                                                                    169
                                                                                                                      MBSCUT
466
                                                                                                                      HESCUT
                                                                                                                                    190
                                                - BEGINNING INCEX FOR KLADING EQUIPMENT COST
FROM MASS STORAGE UNIT 3
- ENDING INDEX FOR SAME SERIES OF READS FROM
MS UNIT 3
                                                                                                                      WASCUT
                                                                                                                                    151
                                                                                                                      MESCUT
                           TEND
                                                                                                                      WESCUT
                                                                                                                                    153
                                                                                                                      MASCUT
                                                                                                                                    154
470
                           IPG
                                                - PAGINATION INDEX.
                                                                            INITIALIZED FEPE.
                                                                                                                      MESCUT
                                                  INCREMENTED IN "OU 11"
COMPLETION FLAG
                                                                                                                      WBS (UT
                                                                                                                                    156
                           IFLGCL
                                                                                                                      MESCUT
                                                                                                                                    157
                                                         C = INITIAL VALUE
                                                1 = CONTINUE FROCESSING EQUIPMENT
2 = COMPLETION. ALL EQUIPMENT PROCESSEC.
- BEGINNING INCEX FOR RECOVERING EQUIPMENT
                  С
                                                                                                                      MBSCUT
                                                                                                                                    199
                 Ċ
                                                                                                                      MESGUT
                                                                                                                                    210
                           IS1
                                                                                                                      MESCUT
                                                  PARMONICS
                                                                                                                      MBSCUT
                                                                                                                                    202
                  0000
                                                - ENDING INDEX FOR SAME SERIES OF MARMONICS
- NUMBER OF COLUMNS OF OUTPUT TO SET LP
- NUMBER OF EQUIPMENT COLUMNS TO SET UP
                                                                                                                                    203
                                                                                                                      KBSOUT
                           NCOL
                           NNUH
490
                                                                                                                      HBSOUT
                                                                                                                                    205
                          IBE G
                                                                                                                      MBSOUT
                                                                                                                                    206
                                  = 1 + (ICCTH - 1) + 3
= 0
                          IENO
                                                                                                                      KBSCUT
                                                                                                                                    207
                          IPG
                                                                                                                      MESCUT
                                                                                                                                    208
                          IFLGCL = 0
                                                                                                                      WBSCUT
                                                                                                                                    209
                          IS1
IS2
4.45
                                   = 1
                                                                                                                                    210
                                   = ICCTR
                                                                                                                      WBSCUT
                                                                                                                                    211
                          NCOL
                                   = ICCTR + 1
                                                                                                                      MBSCLT
                                                                                                                                    212
                          NNUN
                                   = ICCTR
                                                                                                                      WBSOUT
                                                                                                                                    213
                                                                                                                      MESCUT
                                                                                                                                    214
215
490
                 Ċ
                           MODIFY INCICES FOR SITUATION WHERE THERE ARE 9 OF MORE EQUIPMENTS RESCUT
                                                                                                                                    216
                          IF (NC(L.Lt.10) GO TO 115
                                                                                                                      MASOUT
                                                                                                                                    217
                          NCOL
                                = 10
= 10
                                                                                                                                    218
                                                                                                                      KBSCUT
                          NNUM
                                                                                                                      KBSCUT
495
                          152
                                   = 10
                                                                                                                      WESCUT
                                                                                                                                    223
                          IFLGCL = 1
                                                                                                                                    221
                                                                                                                      MBSCUT
                                  = IBEG + 27
                          IENO
                                                                                                                      HESCUT
                                                                                                                                    222
                                                                                                                                    223
                                                                                                                      MESCUT
                           MODIFY INCIGES FOR SITUATION WHERE THEFE ARE EXACTLY 9 EQUIPMENTS WESCUT
51
                                                                                                                      HESOUT
                                                                                                                                    225
                          IF (ICCTH.NE.9) GO TO 115
                                                                                                                      KESCUT
                                                                                                                                    226
                         NCOL = 1J
NNUM = 3
                                                                                                                      MESCUT
                                                                                                                                    227
                                                                                                                      HISOUT
                                                                                                                                    228
                          IS2
                                                                                                                      MBSCUT
                                                                                                                                    229
                         IFLGCL = 2
IEND = I8EG + 24
5 15
                                                                                                                                    230
                                                                                                                      MESCUT
                                                                                                                      WESCUT
                                                                                                                                   231
                                                                                                                                   232
                                                                                                                      WESCUT
                           MAJOR DC-LOOP, THROUGH ALL EQUIPPENTS, 18 AT A TIME
                                                                                                                      HBSCUT
                                                                                                                                    233
                                                                                                                                   234
                                                                                                                      MBSOUT
511
                   115 CONTINUE
                                                                                                                      WESOUT
                          JCT = 5
ICCTR2 = ICCTR
                                                                                                                      MESCUT
                                                                                                                                   236
                                                                                                                                   237
238
                                                                                                                      HESUUT
                          IFI(FOC(ICCTR, 40)).Ed. J) ICCTR2 = ICCTF + 1
                                                                                                                      WESCUT
```

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SUPROUTING WESCUT
                                      74/74 OPT=2
                                                                                                               FTN 4.6+433
                                                                                                                                               67/21/79 23.53.41
                                DO 195 ICOMPS=1, ICCTR2, 13
                                                                                                                                                   TUD23W
                                                                                                                                                                    239
515
                         116 CONTINUE
                                                                                                                                                   RESCUT
                                                                                                                                                                    244
                                NSP = SU/NCOL - 5
NSPP1 = NSF + 1
                                                                                                                                                   kBSOUT
                                                                                                                                                                    241
                                                                                                                                                   MRSCUT
                                 ENCODE (120,111,FMT110) NNUM,NSPP1,NCGL,NSPP1,NCGL,NSP
ENCODE (40,122,FMT12J) NCCL,NSP
ENCODE (4J,123,FMT123) NCGL,NSP
                                                                                                                                                                    243
                                                                                                                                                   MBSOUT
                                                                                                                                                   KASCUT
520
                                                                                                                                                   MBSCUT
                                                                                                                                                                    245
                         117 CONTINUE
                                                                                                                                                   MESCUT
                                                                                                                                                                    246
                                IF ((TITLE.AND.HASK4) .EQ. (ASMDTES.AND.HASK4))
C ENCODE (40,121,FMT120) NOOL,NSP
                                                                                                                                                   MBSCUT
                                                                                                                                                                    247
                                                                                                                                                   WRSCLI
                                                                                                                                                                    248
                                                                                                                                                   HUSCUT
                                                                                                                                                                    249
                      C DO-LOOP 14 STEPS ALKOSS CUTPUT ARRAY CHE COLLHN AT A TIME C AND INDEX 'J' IDENTIFIES AN EQUIPMENT COLUMN
5.25
                                                                                                                                                   WESCUT
                                                                                                                                                   WESCUT
                                                                                                                                                                    251
                                                                                                                                                   HESCUT
                                                                                                                                                                    252
                                 KCT = 1
                                                                                                                                                   MESCUT
                         00 165 K4=1,44
105 UNITFLY(K4) = J.0
                                                                                                                                                                    254
255
                                                                                                                                                   MASCUT
536
                                                                                                                                                   KBSCUT
                                00 140 J=10EG, ILNO, INC
NOXMS3 = J + 2
                                                                                                                                                   MBSCUT
                                                                                                                                                   MESCUT
                                                                                                                                                                    257
                                 CALL FEADMS (3,AMAY,NHBS,ICER(NDXMS3))
                                                                                                                                                   WBSOUT
                                                                                                                                                                    258
                                 JCT = JCT + 1
KCT = KCT + 1
                                                                                                                                                   hESCUT
5 35
                                                                                                                                                   1002B#
                                                                                                                                                                   2 E u
                                 AWORD (NWES.KCT) = 0.0
                                                                                                                                                   HESCUT
                                                                                                                                                                    2 f 1
                                 Q1 = QCHFT(JCT)
                                                                                                                                                   WESCUT
                                 DE = OCFFT21JCT)
                                                                                                                                                  WESCUT
                                                                                                                                                                   2 € 3
                      C CO-LOOP 130 STEPS DOWN THROUGH THE OUTPUT ARRAY ONE ROW AT A TIME
                                                                                                                                                   MESCUT
                                                                                                                                                                   2 64
541
                                                                                                                                                  MRSOUT
                      C ANC INDEX 'I' I DENTIFIE'S A COS ELEMENTS IN "O & S" PHASES
C "OS" MULTIFLIER IS USED ONLY FOR COS ELEMENTS IN "O & S" PHASES
C "OS" MULTIFLIER IS USED FOR COS ELEMENTS IN "ROTRE" AND "INV" PHASES
                                                                                                                                                                   2 t6
2 E7
                                                                                                                                                  MESCUT
                                                                                                                                                   HBSCJT
                                                                                                                                                   HBSCUT
                                                                                                                                                  WBSCUT
                                                                                                                                                                   2 E9
2 T0
545
                                00 130 1×1.NW8SM1
                                IF (APH. EQ. 2) GO TO 124
                                                                                                                                                   HBSOUT
                                IF (I.LT.IFHL) GU TO 124

IF (I.CT.IPH2M1 .ANO. I.LT.IFHL) GO TO 124
                                                                                                                                                                   272
273
                                                                                                                                                  WESCUT
                                 AHORC(I, KCT) = AFAY(I, 1) * Q1
                                                                                                                                                  MBSOUT
55.
                                GO TO 126
                                                                                                                                                  MBSCUT
                                                                                                                                                                   275
                         124 AWORE(I.KCT) = AMAY(I.1) + 02
                                                                                                                                                  WESCUT
                                                                                                                                                                   276
                                                                                                                                                  MESCUT
                                                                                                                                                                   2 77
                     C THE "TOT" ARRAY CONTAINS THE RUNNING CROSS-FOCT TOTALS THRU THE CES
C STRUCTURE: IT PRINTS AS THE LAST (RIGHT-MCST) COLUMN IN THE CHART.
                                                                                                                                                  MASCUT
                                                                                                                                                                   2 16
2 19
                                                                                                                                                  MASCUT
                        126 TOT(I) = TOT(I) + AMORD(I, KCT)

00 125 K=1,NOFLY

IF(I,NE,IFLYROM(K)) GO TO 125
                                                                                                                                                  MBSCUT
                                                                                                                                                                   261
                                                                                                                                                                   212
                                                                                                                                                  WBSCUT
                                UNITELY (KCT) = UPITELY (KCT) + AF AY (1,1)

IF (K.EC. NOFLY) TOTUFLY = TCTUFLY + UNITELY (KCT)

HRITE (E, 302) UNITELY (KCT), TOTUFLY
                                                                                                                                                  HBSCUT
                                                                                                                                                                   264
265
5 é (
                                                                                                                                                   MESCUT
                                                                                                                                                  WESCUT
                                                                                                                                                                   915
                        125 CONTINUE
                                                                                                                                                  HESCUT
                                                                                                                                                                   2 27
                         130 CONTINUE
                                                                                                                                                  WESOUT
                                                                                                                                                                   218
                     C "AMORD (NMBS, KCT)" IS THE COLUMN BOTTOM TOTAL FOR EACH EQUIFMENT C THIS CODE FOR EVALUATING "AMORD (NMBS, KCT)" AND "TOT (NMBS)" MORKS C FOR 2-PHASE WES (I.f. ASMO RUN): AND FOR A 3- OR 4-PHASE WES C (I.E. SINCS RUN) WITH THE PRESUMFTION THAT A 3-PHASE RUN HAS C ROTTE, INVESTMENT AND OLS, AND THAT A 4-PHASE RUN MERELY SPLITS C THE INVESTMENT PHASE INTO "INITIAL" AND "FULL" FROCUCTION COSTS.
                                                                                                                                                  MBSCUT
565
                                                                                                                                                  MB50UT
                                                                                                                                                                   250
                                                                                                                                                  MESCUT
                                                                                                                                                  WESCUT
                                                                                                                                                                   2 5 2
                                                                                                                                                  MBSCUT
                                                                                                                                                                   293
                                                                                                                                                  WBSOUT
576
                                                                                                                                                  KESCUT
```

l,

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SLEMOUTINE WESOUT
                               14174
                                         66T=2
                                                                                 FTN +.6+433
                                                                                                          47/31/79 25.53.41
                                                                                                             WESCUT
                                                                                                                         296
                C
                        ANORD(NHBS, KCT) = ANORD(1, KCT) + ANORD(1PH2, KCT) + ANGRO(1PHL, KCT) WBSCUT
                                                                                                                         257
                                                                                                                         298
                        IF (APF-EC-2) AHORD(NHBS, KCT) = AMORD(1, KCT) + AMORD(IFH2, KCT)
                                                                                                            MBSOUT
                  14d CONTINUE
                                                                                                             #8SCUT
                                                                                                                         259
                        IF (JCT.EQ. ILCTR) TOT (NWBS) = TOT(1) + TOT(1PH2) + TOT(1PHL)
                                                                                                             kBSCUT
                                                                                                                         366
575
                        IF (APH.EQ.2 .AMC. JCT.EQ.ICCTF) TOT (NHBS) = TOT (1) + TOT (IPH2)
                                                                                                            WRSOUT
                                                                                                                         361
                                                                                                             WESCUT
                        DO-LOOF 154 FILLS "KPR" ARRAY WITH EQUIP COLUMN HEACING MNEMONICS
                                                                                                            WESCUT
                                                                                                                         363
                                                                                                                         364
                                                                                                             WESCUT
                        CALL MCVLEV (BLANK, KPR. 20)
                                                                                                             HESCUT
540
                                                                                                             HBSOUT
                                                                                                                         366
                        DO 156 11=IS1, IS2
                                                                                                                         367
                                                                                                            HESCUT
                       KC = KC + 1

K1 = KC + 10

KPR(KC) = NAMESC(I1,1)

KPR(K1) = NAMESC(I1,2)
                                                                                                             WESCUT
                                                                                                                         3 08
                                                                                                             HESCUT
                                                                                                                         329
5 5 5
                                                                                                             RESCUT
                                                                                                                         310
                                                                                                             MESCLT
                                                                                                                         311
                                                                                                             HESOUT
                                                                                                                         312
                                                                                                            MESCUT
                                                                                                                         313
                C CALL SUBRTH "OUT1" TO PHINT PAGE HEADINGS AND LIST THE AHCRD ARRAY
                                                                                                             HBSOUT
                                                                                                                         314
                                                                                                             MESCUT
                С
                                                                                                            WESCUT
                                                                                                                         316
                       CALL OLT1 (ICALL)
                                                                                                                         317
                                                                                                             HESCUT
                                                                                                             WBSCUT
                                                                                                             WESCUT
                                                                                                                         319
                C THE FOLLCWING LOGIC COMPLEMENTS THE EARLIER C RECOVERY INCEX AND COLUMN & SPACING COUNTER LOGIC
505
                                                                                                             MESCUT
                                                                                                                         320
                                                                                                             MBSCUT
                                                                                                                         322
                                                                                                             MESCUT
                        IF (IFLGCL.NE. 1) RETURN
                                                                                                            RESCUT
                       IPG = u
IS1 = 1S2 + 1
IS2 = IS2 + 10
                                                                                                             MESCUT
6 3 6
                                                                                                            WBSOUT
                                                                                                                         325
                                                                                                            WESCUT
                                                                                                                         326
                        IF (152.60.1CGTR .AND. (MOD(IS2,10)).EQ.0) IS2 = IS2 - 1
IF (152.61.1CGTR) IS2 = ICCTR
                                                                                                             NOSCUT
                                                                                                            HBSCUT
                                                                                                                         328
                        NCOL = IS2 - IS1 + 1
IF (IS2.EG.IGGTK) NGOL = NCOL + 1
                                                                                                             FBSCUT
                                                                                                                         329
€ 35
                                                                                                             MBSCUT
                                                                                                                         331
                        NNUM = NCCL
                                                                                                            BBSOUT
                        IF (IS2.EG.ICCTK) NNUM = NCOL - 1
                                                                                                            RESCUT
                        IBEG = IENO + 3
IENO = IBEG + ((HNUM - 1) * 3)
IF (IS2.EQ.ILCTR) IFLGCL = 2
                                                                                                             HBSOUT
                                                                                                                         333
                                                                                                            MESCUT
                                                                                                                         334
335
Eli
                                                                                                            HBSCUT
                  195 CONTINUE
                                                                                                                         126
327
                                                                                                             MBSOUT
                c
                                                                                                            MBSCUT
                                    UUTPUT SHIP SUMMARY CHARTS
                                                                                                            MBSOUT
                                                                                                                         330
                  200 CONTINUE
                                                                                                             MBSCUT
                                                                                                                         339
615
                C
                                                                                                            WBSCUT
                                                                                                                         344
                        TOTSHIF # 0.0
                                                                                                            WESCUT
                                                                                                                         341
                       IPG = 0
IBFG = INOXTOT
IENO = IBEG + NOSUB - 1
                                                                                                            WESCUT
                                                                                                            MESCUT
                                                                                                                         343
                                                                                                            MESOUT
                                                                                                                         344
€20
                        NUM # NOSHE
                                                                                                            WESCUT
                                                                                                                         345
                С
                                                                                                            RESOUT
                                                                                                                         346
                       00 210 J=1.NH6 S
TOT (J) = 0.6
                                                                                                                         347
                                                                                                            MESCUT
                                                                                                            hBSOUT
                  213 CONTINUE
                                                                                                                        349
                                                                                                            WESCUT
625
                                                                                                            MESOUT
                        IFLGCL = 0
                                                                                                            HESCUT
                       IPG = u
                                                                                                            RESCUT
                                                                                                                         352
```

PERSONAL PROPERTY OF

and the confidence of the

The second secon

```
u7/31/75 23.53.41
   SUFFIGUTINE WESOUT
                                     74/74 OFT=2
                                                                                                        FTN 4.6+433
                              ROLLFLG = J
                                                                                                                                           KBSCUT
                                                                                                                                                           353
                              ISHSUE = u
                                                                                                                                          WESCUT
                                                                                                                                                           354
                                                                                                                                           RESCUT
                                                                                                                                                           355
€ 34
                              IS1 = 1
IS2 = NUM
                                                                                                                                           MBSCUT
                                                                                                                                                           356
                              NCOL = NUM + 1
NNUM = NUM
                                                                                                                                           WBSCUT
                                                                                                                                                           357
                                                                                                                                           MBSOUT
                                                                                                                                                           356
                              IF ( NLGL .LE. 10 ) GO TO 220
                                                                                                                                           HBSCUT
€ 24
                    С
                                                                                                                                          MESCUT
                                                                                                                                                           360
                             NCOL = 1]
NNUM = 10
IS2 = 10
IFLGCL = 1
                                                                                                                                           HESCUT
                                                                                                                                                           3€1
                                                                                                                                           WBSCUT
                                                                                                                                           MBSCLT
                                                                                                                                                           363
                                                                                                                                                           364
                                                                                                                                           HESCUT
646
                              SVIEND = ILNO
                                                                                                                                           kBSOUT
                                                                                                                                                           3t6
367
                              IENO = IEEG + 9
                                                                                                                                          SPSCUT
                                                                                                                                           HBSCUT
                    C
                              TEST TO SEL IF EXACTLY 10 SHIFS ARE TO BE OLIPUT. IF YES - DECREASE TO 9 SO THAT 1 HILL AFFEAR ALONG WITH THE TOTAL ON NEXT SET OF CUTPUT. IF ( NUM .NE. 10 ) GO TO 220
                                                                                                                                           HESOUT
                                                                                                                                          WESCHT
                                                                                                                                                           369
                                                                                                                                           MBSOUT
                                                                                                                                                           370
645
                                                                                                                                                          371
372
                              NCOL = 9
NNUM = 9
                                                                                                                                           HBSCUT
                                                                                                                                                           373
                                                                                                                                           MBSCUT
                                                                                                                                           h850UT
                              IEND = IEND - 1
650
                                                                                                                                          KBSCUT
                                                                                                                                                           375
                                                                                                                                           KESCUT
                                                                                                                                                           376
                    С
                       220 CONTINUE
                                                                                                                                           HBSOUT
                                                                                                                                                           377
                    C
                                                                                                                                           WESOUT
                                                                                                                                                           378
                       225 CONTINUE
                                                                                                                                           WESCUT
                                                                                                                                                           379
                              NSF = 90/NCOL - 8

NSFP1 = NSP + 1

ENCODE (120,111,FMT110) NNUM,NSPP1,NCOL,NSPP1,NCGL,NSP

ENCODE (40,122,FFT120) NCGL,NSP

ENCOCE (40,123,FMT123) NCGL,NSP
655
                                                                                                                                           MASCUT
                                                                                                                                                           361
                                                                                                                                           MBSGUT
                                                                                                                                                           362
                                                                                                                                           MESCUT
                                                                                                                                                           364
                       226 CONTINUE
                                                                                                                                                           315
€60
                                                                                                                                           MBSCLT
                              IF ((TITLE.ANO.MASK4) .EQ. (ASMDTES.ANO.MASK4))

ENCODE (40,121.FMT120) NCOL,NSP
                                                                                                                                                          3 e 7
3 e 8
                                                                                                                                           WESCUT
                                                                                                                                           WBSCLT
                       00 106 K5=1,43

106 SHIPFLY(KS) = 0.0

00 240 J=18eG,IFND

CALL PFAONS ( 10, ARAY, NMBS, J )

ISMSUB = ISMSUB + 1
665
                                                                                                                                           KESCUT
                                                                                                                                                           350
                                                                                                                                                           351
                                                                                                                                           MBSCUT
                                                                                                                                           WBSCUT
                                                                                                                                                           3 4 3
                                                                                                                                                           354
                                                                                                                                           WBSOUT
                              KCT = KCT + 1
                    c
                                                                                                                                           MBSCUT
                                                                                                                                                           396
                                                                                                                                                           357
                              00 230 I=1.NWBS
                                                                                                                                           WESCUT
                              AMORE(I, HCT) = AKAY(I, 1) * FLOAT(SHIFSH(ISHSUB))
TOT(I) = TOT(I) + AHORD(I, KCT)
DO 128 K3=1, NOFLY
                                                                                                                                           MBSOUT
                                                                                                                                          MESCUT
                                                                                                                                                          199
675
                                                                                                                                          WESOUT
                                                                                                                                                           4 C ú
                              IF(I=NE.|FLYHOH(K3)) GO TO 128
SHIPFLY(KCI) = SHIPFLY(KCT) + AHORO(I,KCT)
IF(K3-EQ-NUFLY) TOTSHIP = TOTSHIP + SHIPFLY(KCT)
HRITE(E,301) SHIPFLY(KCT),TOTSHIP
                                                                                                                                           MBSOUT
                                                                                                                                                           461
                                                                                                                                          WBS CUT
                                                                                                                                                          4¢2
                                                                                                                                          MESOUT
6 4.
                       128 CONTINUE
                                                                                                                                          HUSSUN
                                                                                                                                                          465
                       230 CONTINUE
                                                                                                                                          WESCUT
                    С
                                                                                                                                          KESCUT
                                                                                                                                                          467
                       240 CONTINUE
                                                                                                                                          HESCUT
                                                                                                                                          MBSCUT
                                                                                                                                                          4.9
```

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SUBJUUTINE WHSCUT
                         74/74 UPT=2
                                                                            FTN 4.0+433
                                                                                                   07/31//9 23.53.41
                                                                                                      MBSCUT
                                                                                                                  410
                      KC = 0
685
                                                                                                                  411
412
                      00 250 I1=IS1.IS2
                                                                                                      MESCUT
                                                                                                      WBSOUT
                      KC = KC + 1
KPF(KC) = NMSUE(1, I1)
                                                                                                      MBSCUT
                                                                                                                  413
                                                                                                                  414
415
                       K1 = KC + 13
                                                                                                      WESOUT
                       *PF(K1) = NMSUB(2, I1)
                                                                                                      MBSCUT
                                                                                                      MBSCUT
                                                                                                                  4 16
                 250 CONTINUE
                                                                                                      WESCUT
                                                                                                                  417
                                  CUTPUT SHIP SUMMARY
                                                                                                      KBSCUT
                                                                                                                  418
                                                                                                      MBSCUT
                                                                                                                  419
               č
                                                                                                      MBSCUT
                                                                                                                  423
                      CALL OUT1 (ICALL)
                                                                                                      WESCUT
                                                                                                      WBSCUT
                                                                                                                  422
                                                                                                      WESOLT
                                                                                                                  423
                                                                                                      KBSCUT
                                                                                                                  424
                 280 CONTINUE
                                                                                                      WESCUT
                                                                                                                  4 25
               С
7 .
                      IF ( IFLGCL .Nc. 1 ) GO TO 340
                                                                                                      MBSCUT
                                                                                                                  426
                                                                                                                  4 27
               С
                                                                                                      RESCUT
                                                                                                      HESCLT
                                                                                                                  428
                      IPG = 0
                                                                                                                  429
438
                      ITEMP = NUM - IS2
                                                                                                      HBSCUT
                      IF ( ITEMF .LT. 1) ) GO TO 290
IS1 = IS2 + 1
IS2 = IS1 + 9
7 15
                                                                                                      WESCUT
                                                                                                                  431
432
433
                                                                                                      WBSOUT
                                                                                                      HBSCUT
HBSCUT
                      IFLGCL = 1
IBEG = IEND + 1
                                                                                                      MBSCUT
                                                                                                                  434
435
                      IEND = 18EG + 9
                                                                                                      WESCUT
                      NCOL = 10
NNUM = 10
                                                                                                      WESCUT
                                                                                                                  436
                                                                                                      MBSCUT
                                                                                                                  437
                      IF ( ACLLFLG . EQ. 2 ) ROLLFLG = 0
                                                                                                      MBSCUT
                                                                                                                  438
                                                                                                      MESCUT
                                                                                                                  439
                                  TEST FOR EVEN NUMBER OF SHIPS TO BE OUTPUT
                                                                                                      WESCUT
                                                                                                                  440
715
                      IF ( IS2 .NE. NUM ) GC TO 22U
IS2 = IS2 - 1
IENO = IENO - 1
                                                                                                      MESCLT
                                                                                                                  441
                                                                                                      MBSCUT
                                                                                                                  442
                                                                                                      MESCUT
                                                                                                                  443
                                                                                                                  444
                      NCOL = 9
                                                                                                      HESCUT
                      NAUM = 9
720
                                                                                                      MBSCUT
                      GO TO 221
                                                                                                      WBSCUT
                                                                                                                  446
                                                                                                      MESCUT
                                                                                                                  447
                 299 CONTINUE
                                                                                                      MBSCUT
                                                                                                                  448
                                                                                                      WESCUT
                                                                                                                  449
                      IFLGCL = 2
                      IS1 = IS2 + 1
IS2 = NLM
125
                                                                                                      WBSCUT
                                                                                                                  450
                                                                                                                  451
                                                                                                      MBSOUT
                      NCOL = ITEMP + 1
NNUM = NCCL - 1
IBEG = IENO + 1
IENO = SVIENU
                                                                                                      MBSCUT
                                                                                                                  452
                                                                                                      WESOUT
                                                                                                                  453
                                                                                                      KBSCUT
                                                                                                                  454
                                                                                                      MBSCUT
                                                                                                                  455
7 70
                      IF ( RILLFLG . EQ. 2 ) ROLLFLG = 0
GO TG 223
                                                                                                      KBSCUT
                                                                                                                  456
                                                                                                      MESOUT
                                                                                                                  457
                                                                                                      MESCUT
                                                                                                                  450
                 10) CONTINUE
                                                                                                      MBSOUT
                                                                                                                  459
                                                                                                      HESCUT
               c
735
                                                                                                                  460
                                                                                                      WBSCUT
                      RETURN
                                                                                                                  461
                                                                                                      MBSCUT
                                                                                                                  462
                 4E3
                                                                                                                  464
746
                                                                                                                  465
                                                                                                                  466
```

| د | UBROUTINE WESOUT | ,4/74 UPT=2 | FTN 4.6+433 | 67/31/79 | 23.53.41 |
|------|------------------|-------------------------|---|----------------|----------|
| | 111 FORMA | F (5H(44X,,12,1H(,I | 2,7HX,A7) /, | MESCUT | 467 |
| | C 39H1 | 2H APPAU KUH. 11X. | 12HCOST ELEMENT, 9X, , [2,1H(, [2,7HX, A7) /, | HESCUT | 468 |
| | C 31H1 | x.7(1H-).1x.3(1H-), | 2x,30(1H+),,12,1H(,12,10+x,8(1+-))) | WESCUT | 469 |
| 745 | 12 FORMA | T (21H(1X.A7.1X.13. | 2x,3416,,12,1H(,12,9Hx,F 7,2))) | hBSCUT | 470 |
| , ,, | 121 FORMA | T (21H(1X.H7.1X.I3. | 2X,3A1(,,12,1H(,12,6HX,F7,3))) | MBSCUT | 471 |
| | 122 FORMA | T (21H(1X.A7.1X.I3. | 2X,3A1c,,12,1H(,12,8HX,F8,2))) | WESCUT | 472 |
| | 123 FORMA | T (13H(A1.13X.3A1J. | ,I2,1H(,I2,8HX,F8.2))) | ₩B SCUT | 473 |
| | 301 FORMA | T LING . + SHIPFLY (KCT |) = +,F8.2,5x, *TOTSHIP = +,F3.2) | MBSCUT | 474 |
| 75. | 302 FORMA | T (1HC. PUNITELY (KCT |) = *, F8.2,5X, *TOTUFLY = *, F3.2) | MBSCUT | 475 |
| | C110 | | | MBSOUT | 476 |

The second secon

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SLEAGUTING HEAD
                                                                                                                                                      u7/31/79 23.53.41
                                           74/74
                                                         2 = 1 نون
                                                                                                                   FTN 4.6+433
                                                                                                                                                          FEAC
                                SUBROUTINE HEAD
                                                                                                                                                          5157
                         SYST
                                                             - NAME OF THE SYSTEM
                                  NMSYS
                                                                                                                                                          SYST
                                                            - NAME OF THE SYSTEM
- TOTAL NUMBER OF SHIPPLASSES CONSICERED
- NAME OF THE SMIPPLASS IN THO MOROS
- INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
(RUNNING TOTAL FOR EQUIPMENTS)
- NAMES OF EQUIPMENT (2 MCFOS) FOR TITLES
IN MESOUT (INDEXED BY EQUIPMENT NUMBER
AND SMIPPLASS NUMBER)
                                  NOSUB
                                                                                                                                                          SYST
                                  NMSUB L . I
                                                                                                                                                          SYST
                                  NGC CMF ( )
                                                                                                                                                          SYS 1
                                                                                                                                                          SYST
                                  NMCCMF( , , )
                                                                                                                                                          SYST
                                                                                                                                                          SYST
                                 NAMESCE . )
                                                             - NAMES OF EQUIPMENT (2 MONDS, 7 CHARS EACH) FUR EQUIPMENT QUANTITIES TABLE - FLEET
                                                                                                                                                          SYST
                                                                                                                                                          SYST
15
                                                                 SUMMARY
                                                                                                                                                          SYST
                                                             - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIPGLASS (BEING PROCESSED)
                                 EGUI
                                                                                                                                                          SYST
                                                                                                                                                                             16
17
                                  SHIFNE
                                                                                                                                                          SYST
                     C
                                                                                                                                                         SYSI
                                                                                                                                                                             19
                                                NAMES / NMSYS, NOSUB, NMSUB(2,+3), NGCOMP(43), NMCOMP(2,100,43), NAMESC(1,0,2), EQUI, SMIFNM
20
                                COMMON / NAMES
                                                                                                                                                          SYST
                                                                                                                                                         SYST
                                SYST
                                                                                                                                                                             22
                     С
                                                                                                                                                          SYST
                                                                                                                                                          SYST
                                                            - COUNT OF DIFFERENT AFFRCPRIATION CCDES - AFPROPRIATION CCDE NAMES
25
                                 NAP
                                 APPROL 1
                                                            - APPROPRIATION CODE NAMES
- PERCENTAGES FOR CBS ELEMENT COST SFLITS
- LOUNT OF THE LIFE CYCLE PHASES
- FIRST CBS ELEMENT NUMBER OF EACH FFASE
- CBS ELEMENT NUMBER FOR THE PAGE)
- TITLES OF CPS PHASES
- FLEET (SYSTEM) SIZE
- LOHEST COST ELEMENT LEVEL TO BE PRINTED
(LOHEST LEVEL TO BE ROLLED UP HITHIN PHASE)
- TOTAL RUTLE COST
- TOTAL RUTLE COST
- TOTAL RIFOUT COST
- MISSILE ROTAL COST
                     ε
                                                                                                                                                         SYST
                                                                                                                                                                             26
                                  SPCLE . 1
                                                                                                                                                          SYST
                                 NPH
                                                                                                                                                         SYST
                                                                                                                                                          SYST
3.0
                                  IPB( )
                                                                                                                                                          SYST
                                                                                                                                                         SYS 7
                                  IPHASE( , )
                                  FLEETZ
                                                                                                                                                         SYST
                                                                                                                                                                             33
                                  NEOLL ( )
75
                                                                                                                                                         SYST
                                  ROTGT
                                                                                                                                                         SYST
                                                                                                                                                                             36
                                  TOT INV
                                                                                                                                                         SYST
                                  TOTALA
                                                                                                                                                         SYST
                                                                                                                                                                             38
                                                                MISSILE ROTE: COST
NUMBER OF CBS LEMENTS TO BE INCLUCED IN
                                  SHISEC
≒ C
                                  NOFLY
                                                                                                                                                         SYCT
                                                                                                                                                                             46
                                                                 FLYAWAY COSTS
                                                                                                                                                          SYST
                                                            FLYAMAY COSTS

- CBS ELEMENT NUMBER FUP FLYAMAY COSTS

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

- YEARS COVERED BY THE SHIP INSTALLATION TABLE

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

PLUS ONE (COLUMNS FOR PRINTING SHIP/INST TABLE)

- FOCTHOTES FOR FIRST TWO MAJOR OUTFUT CHAPTS
                                 IFLYRCH( )
                                                                                                                                                         SYST
                                                                                                                                                         SYST
                                                                                                                                                                             43
                                  TYFARS
                                                                                                                                                          SYST
                                 IYRS
                                                                                                                                                         SYST
                                                                                                                                                                             45
47
                                 FNOTESC . I
                     С
                                                                                                                                                         SYST
                                                                                                                                                                             47
                                                                                                                                                         SYST
                                                                                                                                                                             46
                                COMMCN / MISC / NAP.APPRC(7).SFCL(3.6.2).NFH, IPH(4), [FB(3).
                                                                                                                                                         5757
5757
                                                                                                                                                                             49
50
5 (
                                                 IPHASE (2,41, FLEET Z. NRCLL (4), HOTOT, TOTINV, ICINIF,
                                                SMISRO, NOFLY, IFLYROW (25), NOVES, IYEARS (12), IYES,
                                                                                                                                                         SYST
                                                FNOTES (5.12)
                                                                                                                                                         TZYZ
                                                                                                                                                                             52
                                INTEGER AFPRO, SPOL, FLEETZ
                                                                                                                                                         SYST
                                GENERAL TITLE TO BE USED ON ALL CHARTS COMMON / GENFLE / TITLE(3) INTEGER TITLE
                                                                                                                                                         CENTLE
                                                                                                                                                         GENTLE
                                                                                                                                                         GENTLE
```

| 366406 | TINE HEAD | 14/74 | 041=2 | FTN 4.6+433 | 47/31/79 | 25.53.41 |
|--------|-----------|---------------|-----------------|----------------------|----------|----------|
| | С | | | | HEAE | 5 |
| | С | FRINT SYSTEM | HLADER (DATE A | ND SYSTEM NAME) | HEAD | 5 |
| 60 | C | | | | ⊁E\$C | 7 |
| | | WRITE (6,2.0) | NMSYS, TODAY, T | ITLE, HHEN | FEAC | á |
| | 260 | FORMAT (1H1,4 | 10,116X,A10 / | 1X,2A10,A6,1CGX,A10) | HEAC | 9 |
| | | PETUŔN | | | HEAC | 16 |
| | С | | | | FE#O | 11 |
| 65 | | ENTRY FEAD1 | | | ⊢ € A Γ | 12 |
| | С | | | | HEAD | 13 |
| | C GET | THE DATE AND | TIME OF RUN FR | OM SYSTEM MAINFRAME | FEAC | 14 |
| | С | | | | HEAC | 15 |
| | | WHEN = TIME | (0) | | FÉAC | 16 |
| 7. | | TODAY = DATE | (0) | | HE AO | 17 |
| | | RETUFN | | | +E # C | 18 |
| | | ENO | | | HFAC | 10 |

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17/31/79 23.53.41
                                                                                             FTN 4.6+433
  SLEROUTINE DATAOF
                                  14/14 OFT=2
                                                                                                                            CATACP
                          SUBROUTINE DATAOP
                                                                                                                                              2
                                                                                                                            MSZ
                    ****** C(MON ****** MS (LENGTH AND COUNTER) C(MON ***********
                                                                                                                            MSZ
                                                                                                                            MS2
                 Č
                                                                                                                            MSZ
                                                 - MASS STORAGE UNITS COMMON RECORD LENGTH
                           LENF
                                                 (TYPICALLY 190)

- NUMBER OF ELEMENTS IN THE CBS (MAX 150)

- NUMBER OF LOUIFMENTS IN THE EQUIFMENT
                 С
                                                                                                                            MS2
                           NHRS
                                                                                                                            M5 2
                                                                                                                            r52
                           ICCIP
                                                   CLEMENTS TABLE (150 HORDS) RECORD LENGTH OF 7 ACHAYS
                                                                                                                            MSZ
                           L15 J
                                                                                                                            MS2
                                                    IN THE "CERVLS" COMMON
                                                                                                                            MS 2
                                                                                                                                             12
                                                 - (930 HOROS) FLOORD LINGTH OF 2 APRAYS
IN THE "CERVLS" COMMON
                           LSid
                                                                                                                            r52
                                                                                                                                             13
                                                                                                                             452
                                                                                                                            MS2
                                                                                                                                             15
                          COMMON / MS2 / LENK, NHGS, I CCTF, L 150, L190
                                                                                                                            MS2
                                                                                                                             MS2
                                                                                                                            MS2
                                                                                                                            MS 2
                                                                                                                                             19
                                                                                                                            NELT
2.0
                 NEUT
                                                                                                                            NPUT
                 C VARIOUS CIFER ARRAYS ARE EQUIVALENCED TO THE "ARRAY" ARRAY AS IN:
                                                                                                                            NFU1
                                                                                                                            NFLT
                                              = ARAY (1,1)
25
                     - SLCCM
                                                                                                                            NEUT
                     - BUDGET : CG
                                                                                                                            NEL 1
                                              = ARAY (1.2)
                        INPUPO : ICREC = ARAY(1,1)
                                                                                                                            NPU T
                                                                                                                            NPL I
NFU I
                     - COMPEMPI ROW
                                              = ARAY(1,1)
                     - APCELF : IRAY = ARAY(1.1)
                                                                                                                                             11
                                                                                                                            KPLT
3
                 C
                          COMMON / NEUT
                                                  / ARAY(150.2)
                                                                                                                            NPLT
                                                                                                                                             13
                                                                                                                            NEU 1
                 C
                                                                                                                            CERVLS
                 C ***** CERVLS (COST ESTIMATING RELATIONSHIP (CER) VALUES) COMMON
35
                                                                                                                            CERVLS
                 C THE CEFVLS COMMON CONTAINS LOCATIONS FOR STORAGE OF THE CEF
C INPUT CARD COUNT, THE KOH ID'S, THE GER EQUATION NUMBERS, THE
C NOW CROSS REFERENCE NUMBERS, THE INPUT PARAMETERS, THE ADDITION
                                                                                                                            CERVES
                 C OR CERS CONTROL, STORAGE ARRAY FOR EQUIPMENT NAME, CER INDEX, C AND TRUT/NEUT INDEXES FOR ALL EQUIPMENT INFUT.
                                                                                                                            CENVLS
CENVLS
                                                                                                                                             10
                                                                                                                            CENVLS
                                                                                                                            CERVES
                           CERCT
                                                 - NUMBER OF CER'S FOR THIS PARTICULAR EQUIPMENT
                                                 - NUMBER OF GER'S FOR THIS PARTICULAR EQUIPMEN
(1 HUPO)
- (F CR C) ALFHABETIC CHARACTER INCICATING
'FACTOR' OR 'CER'. (150 HORDS)
- GBS ELEMENT NUMBER TO HFICH THIS GER APPLIES
                                                                                                                                            13
                           IFOFC( )
                                                                                                                            CERVES
                                                                                                                            CERVES
CERVES
                                                                                                                                            15
                           IROWIC
                                                                                                                                            16
                                                                                                                            CEFVLS
                                                    (150 WORCS)
                                                 - LER CONTROL FLAGS (O THRU 6) FOR ADDITIVE CERS OR SUBELEMENTS. & INCICATES NO ADDING.
                                                                                                                                            18
19
                           TAND
                                                                                                                            CERVLS
                                                                                                                            CLEVLS
r į
                                                    1 THRU 6 INDICATE ADD UP SUBELEMENTS.
                                                                                                                            CERVLS
                                                                                                                            CENVLS
CENVLS
                                                     (15) HORCS)
                                                 (15) HORCS)

- HEFERDE NUMBER FOR CER EQUATIONS IN THE 
'GIRLOMP' SUBMOUTINE. (15) HORCS)

- UBS ELEMENT NUMBER USED IN CROSS REFERENCING 
A PREVIOUSLY COMPUTED CES ELEMENT. AT PRESENT 
UNLY CER E (UATION NUMBER & ALLOWS CROSS
                           ICERNO
                                                                                                                            CERVLS
                                                                                                                                            24
25
55
                           IXREFNO
                                                                                                                            CERVLS
                                                                                                                            CERVLS
                                                                                                                            CERVLS
```

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U7/31//9 23.55.+1
    SCENDUTINE DATAOP
                              74/74 OFT=2
                                                                                          FTH 4.6+433
                                                   REFERENCING.
                                                                    O INCIDATES NO CROSS-REF.
                                                                                                                       CERVES
                                                                                                                                      27
                 c
                                                   (15) WORCS)
                                                                                                                       CERVES
                                                                                                                                      ٤٤
                                                  LER CUNTROL FLAGS FOR CROSS-REFERENCING
                           IXREFAD
                                                                                                                       CERVLS
 64
                                                CER SUB-TLEMENTS. (155 HORDS)
- STORES 'FAUTUR' PAFAPETEPS. (900 HORCS)
- STORES NUMBERICAL FARAMETERS. (90) HUROS)
                                                                                                                       CFRVLS
                                                                                                                                      30
                                                                                                                                      31
                 С
                           TESTORE
                                                                                                                       CERVLS
                 č
                           PSSTOFE
                                                                                                                       CENVLS
                                                - A SINGLY-SUBSCRIPTED ARRAY CONTAINING A MAXIMUM OF 100 DATA TRIFLETS WHOSE MEMBERS
                           ICER( )
                                                                                                                       CERVES
                                                                                                                                      33
                 c
 F.E
                                                                                                                       CERVLS
                                                   AREL
                                                                                                                       CENVLS
                             ICEF(1,4,7,
                                               - EQUIPMENT NAME
                                                                                                                       CERVLS
                                                                                                                                      36
                                                                                                                                      37
                             ETC)
ICF # (2, 4, 3
                 C
                                                                                                                       CLAVES
                                                - INDEX FOR MASS STORAGE UNIT 6. INCEX
                                                                                                                       CERVLS
                                                  BEGINS AT 1 AND INCREMENTS BY 9 (1.13.19.
ETC). THE FOLLOWING CATA RECORDS ARE
INDEXED:
                                                                                                                       LERVLS
                                     ETCI
                                                                                                                                      39
                                                                                                                       CFRVLS
                                                                                                                       CERVES
                                                                                                                                      41
                 C
                                                           CERCT
                                                                                   IXREFNO
                                                                                                                       CEAVLS
                                                                                                                                      42
43
                                                            TERRO
                                                                                   TXREFAD
                                                                                                                       CERVES
                 č
                                                                                   IFST CRE
                                                                                                                       CEFVLS
                                                            IROWIC
                                                            IADD
                                                                                   FSSTCRE
                                                                                                                       CERVLS
                                                                                                                                      45
                 C
                                                            ICERNO
                                                                                                                       CERVLS
                                                                                                                                      46
                                                - INDEX FOR MASS STORAGE UNIT 2 AND 3.
                              ICE# (3,6,9
                                                                                                                       CERVLS
                                                   INDEX BEGINS AT 18 AND INCREMENTS BY 2 (18,20,22,ETC) AND IS ICENTICAL TO THE THIRD MEMBER OF DATA TRIPLET STOREC IN
                                                                                                                       CERVLS
                                                                                                                                      48
                 C
 0.0
                                                                                                                       CENVLS
                                                                                                                                      49
                                                                                                                       CERVLS
                                                                                                                                      50
                 C
                                               I HE LREG AFRAY.

SUBELS IS A CROSS-HATCHEO AFFAY HEICH IS RELATED CNE-TO-ONE TO THE CBS.

IT IS USED LOCALLY MITHIN 'COMFCMP' AND 'CERCOMP' FOR INTERIE STORAGE OF UP TO SIX SUEELEMENTS, I THRUPUT, AND I TOTAL VALUE FOR EACH CBS ELEMENT.

A FACTON IS A PRECURSOR OF CHE OR FORE CFSS.
                                                   THE IREC AFRAY.
                                                                                                                       CERVES
                           SUBELS( , )
                                                                                                                       CERVLS
                                                                                                                                      52
                                                                                                                       CENVLS
                                                                                                                                      53
                                                                                                                       CERVLS
                                                                                                                       CEFVLS
                                                                                                                                      55
                                                                                                                       CERVLS
                 ¢
                                                                                                                       CERVLS
                 Ċ
                           FACTOR( )
                                                                                                                       CERVES
                                                                                                                                      5 A
                                                                                                                                      59
                 Ĉ
                                                                                                                       CERVES
 ٩Ĺ
                                                  CERS.
                 C
                                                                                                                       CEFVLS
                                                                                                                       CERVLS
                          COMMON /CERVLS/ CERCT, IFOFC(150), IROWID(150), IADD(156),
                                                                                                                                      €2
                                               ICERNO(150), IXREFNO(150), IXREFNO(15)), IFSTORE(6,150), PSSTURE(6,150), ICER(300), SUEELS(8,150), FACTORS(150)
                                                                                                                       CERVES
 415
                                                                                                                       CERVES
                                                                                                                                      £5
                                                                                                                       CERVES
                          INTEGER CERCT
                                                                                                                       CLHVLS
                                                                                                                                      21
                    CERVLS
                                                                                                                                      to
                                                                                                                       CERVES
1 . .
                             ARRAY OFFINING THE ROLL-OF INPUT NUMBERS, TOTAL COUNT OF COST ELEMENTS HITH SPECIFIC FOLL-OF NUMBERS TO BE CUIPUL, AREAY OF SCLECTED HOS ELEMENTS NUMBERS, SELECTED ROLL-OF
                                                                                                                       RELUFOT
                                                                                                                                       3
                                                                                                                       FCLUFCT
                                                                                                                       OL LECT
                              OLTFUI FLAG
                                                                                                                       HOLLFOT
                          COMMON / RULUPCT /
                                                   IROLL(15)), KCLLTOT, RULLSL(15), ROLLFLG
1 15
                                                                                                                       KCLLFCT
                          INTEGER ACLLTOT, HOLLSE, KCLLFEG
                                                                                                                       HOLLFOT
                                                                                                                       RCLLFCT
                             ************ BULG CCMMON ****************
                                                                                                                       ROLLFOT
                                                                                                                       ACL LECT
116
                                                                                                                       CHARTS
                                                                                                                                       3
                    CHAFTS
                                                                                                                       CHAFTS
                                                                                                                                       5
                          CHRICHT CONTAINS THE MAJOR OUTPUT CHART CONTROLS
                                                                                                                       CHALTS
```

```
17/31/79 23.53.41
                                                                                                      FTH 4.6+435
    SCENOUTINE DATAUP
                                      74/74 CPT=2
                                                                                                                                        CHAFTS
                                                       - GENERATE CHART
- NO GENERATION OF CHART
115
                    c
                                                                                                                                         CHAFTS
                                                                                                                                                           8
                                                                                                                                        CHA FTS
                                                       - IF EQUAL TO S - CALLS HESOUT(1) FOR EQUIPMENT
                                                                                                                                        CHAFTS
                                                                                                                                                          10
                    C
                               CHRICAT (1)
                                                          ELEMENT LIFE CYCLE COSTS - FLEET SUMMARY
                                                                                                                                         CHAFTS
                                                       - IF EQUAL TO 1 - CALLS MESOUT(2) FOR UNIT SHIP COSTS BY EQUIPMENT FLEMENT - IF NE. TO J - CALLS MESTOT BECAUSE
                               CHRTCHT (2)
                                                                                                                                        CHARTS
                                                                                                                                        CHAFTS
                                                                                                                                                          13
                    C
                                                       SHIP COSTS BY EQUIPMENT FLERENT

- IF NE. TO J - CALLS HESTOT BECAUSE

- HBSOUT(2) WAS NOT CALLED

- IF EQUAL TO J - CALLS HESOUT(3) FOR SHIF

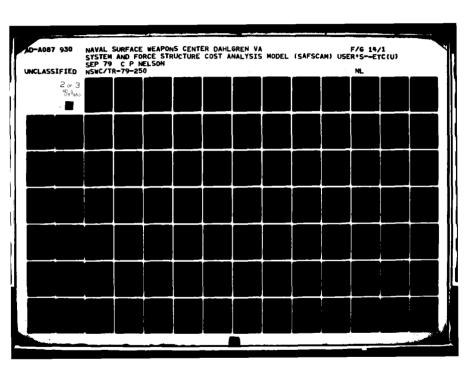
LLASS SUMMARY

- IF EQUAL TO 0 - CALLS BLOGUP FOR LIFE

CYCLE COSTS BY BUDGET APPROPRIATIONS

- IF N. TO J - CALLS RELECT FOR CUTPUT
                                                                                                                                         CHAFTS
                                                                                                                                        CHARTS
                                                                                                                                                          15
                                                                                                                                         CHAFTS
                    C
                               CHRICAT(3)
                                                                                                                                                          16
                                                                                                                                         CHAFTS
                                                                                                                                                          17
125
                    C
                               CHRICAT (4)
                                                                                                                                         CHARTS
                                                                                                                                         CHALTS
                                                                                                                                                          19
                                                          1F N. . TO 3
                                                                                - CALLS RCLCNT FOR CUTFUT by
                                                                                                                                         CHAFTS
                               CHRICAT (5)
                                                          ROLL-UP NUMBER
                                                                                                                                         CHAFTS
                                                                                                                                                          21
                                                       - IF EQUAL TO U - LISTS THE SUBELS AREAY
                                                                                                                                         CHAITS
1.30
                    c
                               CHRICKT (6)
                                                          FUR ENTIFE CES FOF PROOFING
                                                                                                                                         CHA FTS
                                                                                                                                        CHAFIS
                                                                                                                                                          24
                                                                                                                                                          25
                                                                                                                                        CHARTS
                    C
                              COMMON / CHARTS / CHRTCHT(15)
                                                                                                                                         CHARTS
                              INTEGER CHRTCHT
135
                                                                                                                                        CHA FTS
                                                                                                                                                          21
                    C ******* CSTAB (EQUIPMENT QUANTITIES) COPHON ***************
                                                                                                                                        CSIAE
                                                                                                                                         CSTAE
                                                                                                                                                           3
                               OCHFT
                                                       - QUANTITY OF EQUIPMENT ALREADY DEPLOYED
                                                                                                                                         CSIAL
                                                          (O & S ) OVER ALL SHIPCLASSES (G1) (INTEGER)
QUANTITY OF EQUIPMENT TO BE MANUFACTURER
INSTALLED (INVESTMENT) CVER ALL SHICLASSES
                                                                                                                                         CSIAB
                                                                                                                                         CSIAB
                               QCMPT2
1 -
                                                                                                                                         CSTAB
                    c
                                                           (Q2) (REAL)
                                                                                                                                         CUTAR
                                                          SINGLY-DIMENSICHED AFFAY WHOSE PEPBERS ARE
                                                                                                                                         CSTAE
                               CSTABLE
                                                          A SERIES OF 1
--SHIPCLASS NAME
                                                                                                                                         CSTAE
                                                                                                                                                          1 i
                                                                                                                                        CSTAR
145
                    C
                                                                                                                                                          11
                                                                   --O & S QUANTITY OF EQUIPMENT FOR EACH
SHIP ON A PARTICULAR SHIFCLASS
--INV QUANTITY OF EQUIPMENT FOR EACH
                                                                                                                                         CSTAB
                                                                                                                                         CSIAB
                                                                                                                                                          1.3
                                                                                                                                         CSIAE
                                                          SHIP ON A PARTICULAR SHIPCLASS
(THESE THREE MEMBEPS ARE GIVEN FOR EACH
SHIP CLASS MAKING A SERIES OF CATA TRIPLETS)
(VALUES APE INTEGER)
                                                                                                                                         CSTAE
150
                                                                                                                                        CSTAB
                                                                                                                                                          16
17
                    C
                                                                                                                                         CSIAE
                                                       - SINGLY-OIMENSIONED AKRAY OF THE INVESTMENT 
QUANTITY OF EQLIFHENT FOR EACH SHIP ON A 
PARTICULAR SHIPCLASS. DATA ELEMENTS MUST
                               CSTAREL
                                                                                                                                         CSTAE
                                                                                                                                                          19
                                                                                                                                        CS 148
                                                                                                                                                          ٤٥
                    C
                                                                                                                                         CSIAE
155
                                                          BE STOREC IN THE SAME STIFFCLASS ORCER AS
CSTARLE. THE TWO ARRAYS MAY BE THOUGHT
OF AS A SERIES OF DATA CUADRUPLETS.
                                                                                                                                        CSTAE
                                                                                                                                        CSTAE
                                                                                                                                                          23
                    C
                                                                                                                                         CSTAB
                                                                                                                                         CSTAB
                                                                                                                                                          25
                                                                                                                                        CS148
166
                    С
                                                                                                                                                          ît
                              COMMICN /GSTAH/GCMPT(130),QCMPT2(100),CSTABLE(3750),CSTABLE(1250)
                                                                                                                                         CSTAB
                              INTEGER GCMPT, USTABLE

GENERAL TITLE TO BE USED ON ALL CHARTS
COMMON / GENTLE / TITLE(5)
                                                                                                                                        CSTAB
                                                                                                                                                          íc
                                                                                                                                        CINTLE
                    Ċ
                                                                                                                                        GENTLE
                              INTEGER TITLE
                                                                                                                                        CINTLE
1+5
                                                                                                                                         CHIFINS
                    C ****** MARKAY (1960 AFRAY) COMMON ************
                                                                                                                                         SHIFINS
                                                                                                                                        SELFINS
                    THE IPEC ARRAY IS A SINGLY-SUBSCRIPTED ARRAY WHOSE FIRST FOSITION O IS THE TOTAL NUMBER OF UNIQUE SHIPCLASS/EQUIPPENT COMBINATIONS.
                                                                                                                                        SHIFINS
```



| | SUERDUTINE | OA TA OF | 74/74 | OF T | FTN 4.6+433 | 67/31/79 | 23.53.41 |
|-------|------------|------------|-----------|-------|--|--------------------|----------|
| | | - THE NEVT | 7D: F 905 | | INS START A SERIES OF TRIPLETS WHOSE | SFIFINS | ۵ |
| | Č | | | | NAME, EQUIPPENT NAME, MS 3 INDEX. | SHIFINS | ÿ |
| | č | | | | THE RUNNING SUM OF THE TOTAL NUPBER OF UNIQUE | SHIFTAS | 16 |
| 175 | | | | | SHIPCLASS/EQUIPPENT COMBINATION IN THE | SHIFINS | 11 |
| • | à | | | | EQUIPMENT LEVEL INFUT | SHIFINS | 12 |
| | à | | (2,5,6, | - | THE NAME OF THE SHIP CLASS | SHI FINS | 13 |
| | Č | | 11,ETC) | | | SHI FINS | 14 |
| | C | | (3,6,9 | - | THE NAME OF THE EQUIPMENT | SHIFINS | 15 |
| 101 | | | 12,ETC) | | | SHIFINS | 16 |
| | C | | (4.7,10 | - | INDEX FOR HASS STORAGE UNIT 3. AN INTEGER | Shipins | 17 |
| | Ç | | 13,ETC) | | NUMBER BEGINNING A 18 AND INCREPENTING BY | SHIFINS | 18 |
| | Ç | | | | 2 TO FORM 18, 20, 22, 24, ETC. THIS INDEX IS | SHIFINS | 19 |
| | g | | | | THE STARTING LOCATION OF A RECORD (LENGTH: "NWBS WORDS") ON MASS STORAGE 3 WPICH | SHIFINS | 20 |
| 1.85 | | | | | "NWBS WORUS") ON MASS STORAGE 3 WPICH | SHIFINS | 21 22 |
| | Č | | | | CONTAINS THE UNIT COSTS OF THE EQUIPMENTS GN A UNIT SHIP (COMPLTED BY SUBROUTINE | 2011176 | 23 |
| | Č | | | | COMPCMP). | SHIFINS | 24 |
| | č | | | | Confider 1 s | SHIFINS | 25 |
| 190 | | | N / HAREA | ¥ / | IREC (3750) | SHIFINS | 26 |
| • • • | C | | , , , | • • | | SHIFINS | 27 |
| | č | | INS (SHIP | Sui | MATION AND INSTALLATION TABLE) COPMON ***** | SHIFINS | 28 |
| | Č | | | | | SHIFINS | 29 |
| | Č | | SLM() | • | CONTAINS THE TOTAL NUMBER OF UNIT SHIFS FOR | SHIFINS | 36 |
| 195 | | | | | EACH SHIP CLASS FOUND BY INSPECTION OF | SHIFINS | 31 |
| | C | | | | THE SHIP INSTALLATION TABLE | SHIFINS | 32 |
| | C | | TE(,) | • | THE SHIP DEPLOYMENT/INSTALLATION SCHEDULE | SHIFINS | 23 |
| | q | | | | TABLE. FOR EACH SHIP CLASS! | SHIFINS | |
| _ | Ç | | | | SINSTBIX.1) - SHIP CLASS NAME | SHIFINS | 25 |
| 2 | q | | | | SINSTB(X.2-7) - THE YEARLY NUMBERS OF | SHIFINS | 36 37 |
| | 0 | | | | UNIT SHIPS OF THIS CLASS TO BE | SHIFINS | 37 |
| | Č | | SH() | _ | DEPLOYED/INSTALLED THE TOTAL NUMBER OF UNIT SHIFS FOR EACH | SHIFINS SHIFINS | 39 |
| | č | | 366) | _ | SHIP CLASS. IT IS THE SAME COUNT AS | SHIFINS | 43 |
| 2115 | | | | | SHIPSUM, HOWEVER, IT IS DEFINED IN A | SHIFINS | 41 |
| | č | | | | SHIPSUM, HOWEVER, IT IS DEFINED IN A SPECIFIC ORDER AFTER ERROR-CHECKING IN STRUCKS WESTER DOLL OF STRUCKS | SHIFINS | 42 |
| | ā | | | | SLCCH'S NESTED DO-LCOFS WHICH | SHIFINS | 43 |
| | C | | | | DETERMINE THE TOTAL COSTS BY SHIP CLASS | SHIFINS | 44 |
| | C | , | | | | SHIFINS | 45 |
| 216 | | CONHO | N / SHIPI | NS / | SHIPSUM(43), SINSTB(43,7), SHIPSM(43) | SHIPINS | 46 |
| | | | EF SHIPSL | im, S | INSTB, SHIFSM | SHIFIAS | 47 |
| | Ç | | | | • | SYST | 2 |
| | g | | ••••• | **** | NAMES COMMON ***************** | SYSI | 3 |
| | ç | | _ | | | SYST | 4 |
| 215 | 0 | | _ | | NAME OF THE SYSTEM | SYST | 5 |
| | Č | NUSU | 0 () | • | TOTAL NUMBER OF SHIPCLASSES CONSIDERED NAME OF THE SHIPCLASS IN THE WORDS | T2Y2 T2Y2 | 6 7 |
| | č | MOCC | B(,) | - | INDEX NUMBER FOR EQUIPMENTS (CUMPONENTS) | SYST | á |
| | č | | | - | (RUNNING TOTAL FOR EQUIPMENTS) | SYST | Š |
| 220 | | | HF1 1 | - | NAMES OF EQUIPMENT (2 WORDS) FOR TITLES | 1242 | 10 |
| | č | | , , , | | IN HOSGUT (INDEXED BY EQUIPMENT NUMBER | SYST | ii |
| | C | , | | | ANO SHIPCLASS NUMBER) | SYST | 12 |
| | Ċ | NAME | SC(,) | - | NAMES OF EQUIPMENT (2 WORDS, 7 CHARS EACH) | SYST | 13 |
| | C | ; | • | | FOR EQUIFMENT QUANTITIES TABLE - FLEET | SYST | 14 |
| 2 25 | C | ; | | | SUMMARY | SYST | 15 |
| | C | | | | PRESENT EQUIPMENT (BEING PROCESSED) | SYST | 16 |
| | C | | NF | | PRESENT SHIPCLASS (BEING PROCESSED) | SYST | 17 |
| | C | ; | | | | S 15 T | 18 |

| | SUEROUTINE | DAT | AGP | 74/74 | 0FT=2 | FTN 4.6+433 | 07/31/79 | 23.53.41 |
|------|------------|------|--------|----------|-----------------|---|----------|----------|
| | | c | | | | | SIST | 19 |
| 236 | ì | | COMPCN | / NAME | S / NESYS | , NOSLE, NHSUF(2,43), NCCOMF(43), | SYST | ٤٠ |
| | | | 1 | MMCC | | , NAMESC (100,2), EQUI, SHIPAM | SYST | 21 |
| | | | _ | | SHIPNH | • | SYST | 22 |
| | | C ++ | | | | ANEOUS) COMMON ************** | SIST | 23 |
| | | č | | | | | SYST | 24 |
| 2.35 | | č | NAP | | - COUNT C | F DIFFERENT AFPROPRIATION CODES | TZYZ | 25 |
| ٠.,, | | č | APPRO | | | LATICA CODE NAMES | SYST | žb |
| | | č | SPCLI | | | AGES FOR CBS SLEMENT COST SPLITS | SIST | 27 |
| | | č | NPH | , , | | F THE LIFE CYCLE PHASES | SYST | 28 |
| | | č | IFH (| | | BS ELEMENT NUMBER OF LACE PHASE | SYST | 29 |
| 240 | | č | IPB (| | | MENT NUMBER FOR PAGE BREAKS | 5757 | 30 |
| 240 | | c | 1101 | , | | BS NUMBER FOR THE PAGE) | SYST | 31 |
| | | č | TENAS | . (,) | | OF CES PHASES | T2Y2 | 32 |
| | | C | FLEET | | | SYSTEP) SIZE | 5 Y S T | 33 |
| | | C | | _ | | COST ELLMENT LEVEL TO BE PRINTED | SIST | 24 |
| 2.5 | | C | NROLL | . , | | LEVEL TO BE ROLLED UP WITHIN PHASE) | SYST | 25 |
| 245 | | | | | | | SYST | 36 |
| | | C | ROTCT | | | OTLE COST | | |
| | | C | TOT IN | | | INVESTMENT COST HINUS TOTAL RIPOUT | TZYZ | 37 |
| | | Ç | TOTAL | | | IPOUT COST | SIST | 28 |
| | | C | SHISR | - | | KOTLE COST | SYST | 39 |
| 250 | | C | NOFLY | | | OF CBS ELEMENTS TO BE INCLUCED IN | SYST | 40 |
| | | C | | | FLYAHAY | | SYST | 41 |
| | | C | IFLYR | CH() | | HENT NUMBER FOR FLYAWAY COSTS | SYST | 42 |
| | | С | NOYRS | | | OF YEARS IN SHIP INSTALLATION TABLE | SYST | 43 |
| | | С | IYEAR | Ş | | OVEREC BY THE SHIP INSTALLATION TABLE | SYST | 44 |
| 255 | | C | IYRS | | | OF YEARS IN SHIP INSTALLATION TABLE | S 15 T | 45 |
| | | C | | | PLUS OF | NE NGGLUMNS FOR PRINTING SHIF/INST TABLE) | SYST | 46 |
| | | C | FNOTE | S(,) | - FOOTNOT | ES FOP FIRST TWO MAJOR OUTPUT CHAFTS | SYST | 47 |
| | | С | | | | | 54 S 1 | 48 |
| | | | COMMON | / HISC | / NAP, APPRO | (7),SPCL(3,E,2),NPH,IPH(4),IPB(3), | 5 15 T | 49 |
| 260 |) | | 1 | IPHA | SE(2.4) . FLEE | T Z.NROLL (4) .RGTOT.TOTINV.TCTRIP. | 1242 | 50 |
| | | | 2 | SMIS | RO. NOFLY . IFL | Y RON (251, NOYRS, I YEARS (12), IYRS, | T2Y2 | 51 |
| | | | 3 | | ES(5,12) | | SIST | 52 |
| | | | INTEGE | | , SPCL, FLEETZ | | SYST | 53 |
| | | C | • | | , | | SYST | 54 |
| 265 | | _ | DIMENS | TON TOU | MMY (10) | | CATAGE | 13 |
| | | | DIMENS | | | | CATACP | 14 |
| | | | REAL I | | | | CATAGE | 15 |
| | | | INTEGE | | Y 6 | | DATAGE | 16 |
| | | | | | 1100(3).FMT1 | 191171 | CATACP | 17 |
| 270 | | | | | 60.FMT1191 | 1132.07 | CATACE | 18 |
| 270 | | С | | | T ELEMENT DE | CODIDITONS | CATAGE | 19 |
| | | · | KZERO: | | I ELEMENT UE | SCRIFIIONS | CATACP | 20 |
| | | | KONE : | | | | CATACP | 21 |
| | | | | | | | | |
| | | | CALL H | | | | CATACE | 22 |
| 275 | • | | | | J KZEPO | | CATAGE | 23 |
| | | | | |) KZEKO | | CATACP | 24 |
| | | | IROLLI | | | | CATAOR | 25 |
| | | | INDEX | | | | CAIACP | 26 |
| | | | MOPR = | | | | CATAGE | 27 |
| 256 | , | | LITHUS | - | | | CATACE | 26 |
| | | | DO 51 | I= 1, £ | | | DATAOF | 25 |
| | | | CALL F | CACHS (| 2,AKAY, LENR, | INDEX+I) | CATAGE | 3. |
| | | | DO 28 | J= 1,40P | P | | DATAGE | 21 |
| | | | INDXL | = 1*5 | | | CATAUF | 32 |
| 215 | • | | INDAF | = INUXL | - 4 | • | DATACE | 23 |
| | | | | | | | | |

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SLEMUUTINE DATAOR
                                                                                  FT# 4.6+433
                                                                                                           67/31/79 23.53.41
                               74/74
                                        0FT=2
                        NO = (I-1)*HDPR + J
                                                                                                             CATACP
                                                                                                             CATAOP
                        IROLLIG = IRCLLID + 1
                                                                                                                           35
                        WRITE (6,1016) NO. (ARAY(K), K=1NOXF, INOXL), INOLL(IRGLLIO) IF ((I-1)*MOFR*J.GE.NMBS) GO TO 38
                                                                                                                            36
                                                                                                             CATAOP
                                                                                                                            37
                                                                                                                           38
39
                                                                                                             CATACE
290
                C C PERFORM THE LITHUS TEST: IF TRUE, WRITE PHASE-BREAK PAGE MEADING
                                                                                                             CATAOP
                                                                                                             CATAGP
                                                                                                                            40
                        IF (LITHUS.GT.3) GO TO 20
                                                                                                             CATAGE
                                                                                                                           41
                        IF (((1-1)*MOPR + J) .EQ. IPB(LITHUS)) GO TO 10 GO TO 20
                                                                                                             CATACP
                                                                                                                           42
                                                                                                             CATAOP
                                                                                                                            43
295
                                                                                                             DATAOP
                                                                                                                           44
                    10 LITHUS - LITHUS + 1
                        WRITE (6,1000) KUNE
                                                                                                             DATAOP
                                                                                                                           46
47
                    29 CONTINUE
                C
                           OUTFUT SYSTEM DATA
                                                                                                             CATAGE
                    30 INDEX = 6
MDPR = MGPR/2
                                                                                                             DATAGE
340
                                                                                                                           44
                                                                                                             CATACP
                                                                                                             CATAOP
                                                                                                                           50
                000000
                                                                                                                           51
                        OUTPUT SHIP CLASS/EQUIPMENT CATA
                                                                                                             CATACP
                                                                                                                           52
53
                                                                                                             CATAGE
                                           - NCT IS THE TOTAL NUMBER OF VALUES STORED IN THE "IREC" ARRAY
3 15
                         NCT
                                                                                                             CATACP
                                                                                                                           54
                                                                                                             DATAOP
                                           - ISUBCER IS A LOCATION COUNTER FOR GETTING VALUES IN THE "ICER" ARRAY
                                                                                                                           55
                                                                                                             CATACP
                         ISUEC LR
                                                                                                             DATAGE
                                                                                                                           56
57
                                                                                                             CATACE
                  4049 CONTINUE
                                                                                                                           58
59
£6
                        NCT = IREC(1) + 3
                                                                                                             CATAOP
310
                                                                                                             CATACP
                        ISUBCER = 1
                        ISNC = 1
                                                                                                             DATAOP
                                                                                                                           £1
                                                                                                                           €2
€3
                C PRINT ALL TPUT NPUT, & CER INPUT (FROM HS UNITS) BY EQUIFMENT
                                                                                                             DATACE
                C
                                                                                                             CATACP
115
                                                                                                             DATACP
                        UO 75 I=1,ICCTR
                                                                                                                           64
                                                                                                             CATAOP
                                                                                                                           €5
                C
                        GET ALL THE SHIP CLASS NAMES THAT THIS EQUIPMENT IS ON
                                                                                                                           66
67
                                                                                                             CATAGE
                        ICOUNT = 0
                                                                                                             CATACP
                        ICOURT = U

00 41 II=3,NCT,3

IF ( ICER(ISUBCCR) .NE. IREC(II) ) GO TO 41

ICOURT = ICOURT + 1

MMCUP(ICOURT) = IREC(II-1)
                                                                                                                           68
69
70
321
                                                                                                             CATAOP
                                                                                                             CATAGE
                                                                                                             CATAOP
                                                                                                             CATACP
                        INDEX = IREC(II+1)
                                                                                                             CATAGE
                                                                                                                           72
                    41 CONTINUE
                                                                                                             CHIACP
325
                C C MRITE A HEADING LINE WITH THE EQLIPMENT NAME & ITS SHIP CLASS NAMES
                                                                                                             CATAGP
                                                                                                                           74
75
                                                                                                             CATACE
                                                                                                                           76
77
                                                                                                             CATACP
                        WRITE (6,1848) NAMESC(ISNC,1), NAMESC(ISNC,2), (NMDUM(K),K=1,ICCLNT)
                                                                                                             CATACE
                        IPUT = 10HTHKOUGHPUT
WRITE (6,105J) I FUT
3 %
                                                                                                             CATAGE
                                                                                                                           78
                                                                                                                           79
                                                                                                             CATAGE
                        CALL READHS (2, AFAY, LENR, INDEX)
                                                                                                             CATACE
                        OO SU J=1,MOPR
INDXL = J=10
INDXF = INDXL-9
ISUBDUM = 0
                                                                                                             CATACP
                                                                                                                           £1
                                                                                                             DATAOP
                                                                                                                           62
3 35
                                                                                                             CATAGE
                                                                                                                           ٤3
                                                                                                             CATAOP
                                                                                                                           24
85
                        DO 45 IGUM=INDXF, INDXL
                                                                                                             CATAGE
                        ISUBGUM = ISUBGUM + 1
IF ( ARAY(IOUM) .NE. 0 ) GO TO 42
IDUMMY(ISUBGUM) = 10H
                                                                                                                           66
67
                                                                                                             CATAGE
                                                                                                             CATAGP
                                                                                                             CATACP
340
                                                                                                                           48
                    GO TO 45
                                                                                                             CATAGE
                                                                                                             DATAGE
                                                                                                                           50
```

```
47/31/75 23.53.41
    SURROUTINE DATAUP
                                   74/74 OFT=2
                                                                                              FTN 4.6+433
                           IDUMPY (ISUBDUM) = AKAY (IDUM)
                                                                                                                             CATAGE
                                                                                                                             CATACE
                       45 CONTINUE
                                                                                                                                              92
                       50 WRITE (6,1030) INOXF, INOXL, (IDUMHY (K), K=1, ISUBCUM)
                                                                                                                             DATAOP
                                                                                                                                              ç3
345
                                                                                                                             GATAGE
                                                                                                                                             94
95
                                                                                                                             CATACH
                           GET EQUIPMENT RAW LER DATA FROM MASS STORAGE UNIT &
                                                                                                                              CATACE
                  c
                                                                                                                                              ç6
                                                                                                                              CATAGP
                                                                                                                                              ç7
                           INDGEP = ICEK(ISUBCER+1)
                           CALL READMS ( & CERCT, 1, INDCER )
IF (CERCT.GT.u) GO TO 61
                                                                                                                             CATAOP
351
                                                                                                                                             98
                                                                                                                             CATAOP
                                                                                                                                              19
                            GO TO 65
                                                                                                                             CATACE
                                                                                                                                            166
                                                                                                                             DATAGE
                           CONT INUE
                                                                                                                                            101
                           CONTINUE
IPUT = 10HCER INPUT
HRITE (6,1070) IFUT
CERCTXE = CERCT * 6
CALL REAOMS (8,1FORC ,CERCT
CALL REAOMS (8,1ROMIO ,CERCT
CALL REAOMS (8,1ADO ,CERCT
CALL REACMS (8,1ADO ,CERCT
                                                                                                                             CATACP
                                                                                                                                            142
355
                                                                                                                             CATAOF
                                                                                                                                            143
                                                                                                                             CATAGE
                                                                                                                                            164
                                                                                                                                            165
                                                                     ,INDCER+1)
                                                                                                                             CATAGE
                                                                       .INCCE k+2)
                                                                                                                             CATAGE
                                                                                                                                            116
                                                                                                                             CATAGE
                                                                       . INDCE F+31
                                                                                                                             CATACP
                                                                       , INOCER+4)
                                                                                                                                            108
360
                           CALL READMS (0.1XREFNG, CERCT CALL READMS (6.1XREFAG, CERCT
                                                                                                                             CATAOP
                                                                       , INCCER+E)
                                                                                                                             CATACE
                                                                                                                                            110
                           CALL READMS (8.IFSTORE, CERCTX6, INDCER+/)
CALL READMS (8.PSSTORE, CERCTX6, INCCER+8)
                                                                                                                             DATAGE
                                                                                                                                            111
                                                                                                                              CATAOF
366
                           WRITE (6,1144) (K2,K2=1,6)
                                                                                                                             CATAGE
                                                                                                                                            113
                                                                                                                             CATAGE
                                                                                                                                            114
                            HRITE AN CUTPUT DETAIL LINE FOR EACH CER FOR THIS EQUIPMENT
                                                                                                                              CATAGE
                                                                                                                             CATAGE
                                                                                                                                            116
                                                                                                                             CATACP
                                                                                                                                            117
                           00 62 K= 1.CERCT
                          HRITE (E.1185) IFONC(K), IRCWID (K), IADD (K), ICERNO(K), C IXREFNO(K), IXREFAU(K), (IFSTORE (K1, K), PSSTORE (K1, K), K1=1,6)
                                                                                                                              CATACE
37.
                                                                                                                             CATAGE
                                                                                                                                            119
                                                                                                                             CATAOP
                       62 CONTINUE
                           CONT INCE
                                                                                                                              CATACE
                           ISUBCEF = 1SUBCER + 3
ISNC = ISNC + 1
                                                                                                                                            122
                                                                                                                             CATACP
                                                                                                                             CATAUP
375
                       75 CONTINUE
                                                                                                                             CATAOP
                                                                                                                             CATAGE
                                                                                                                                            125
                                         GUTPUT SHIP INSTALLATION SCHEDULE
                                                                                                                             CATAGE
                                                                                                                                            126
                  C
                                                                                                                             CATAGE
                           CALL HEAD
HRITE (6,1390) FLEETZ
ITOTAL = 5HTOTAL
ISPACE = (136 - ((IYRS*8) + 18))/2
ISPAC1 = ISPACE + 15
380
                                                                                                                             DATAGE
                                                                                                                                            128
                                                                                                                             CATECP
                                                                                                                             CATAOP
                                                                                                                                            130
                                                                                                                             CATACE
                                                                                                                                            131
                                                                                                                             CATAOP
                                                                                                                                            132
                    1191 FORMAT (4+(1Hu, I2, 2Hx, , I2, 11H (I4, 4x), A5))
                                                                                                                             DATAGE
                                                                                                                                            123
365
                    ENGODE (3).131,FHT1191) ISFA(:,NOYES

WRITE(E,FFT1191) (IYEARS(I),I=1,NCYRS),ITOTAL

1100 FORMAT (4+(1HC,I2,9HX,A6,4X,,I2,3Hel))

ENGOGE (3).1144,FHT1103) ISFA(E,IYES

DO 80 I=1,NOSU8
                                                                                                                             CATAGE
                                                                                                                                            124
                                                                                                                             CATACE
                                                                                                                                            135
                                                                                                                             CATACP
                                                                                                                             CATAGE
                                                                                                                                            1 37
                                                                                                                             DATAGE
396
                                                                                                                                            136
                            WRITE(E, FMT1100) (SINSTB(I, K), K=1, IYRS), SHIFSUM(I)
                                                                                                                             CATAGE
                                                                                                                                            139
                                                                                                                             CATAOP
                       BA CONTINUE
                                                                                                                                            140
                                                                                                                             DATACE
                                                                                                                                            141
                                        GUTPUT EQUIPPENT SCHEGULE PER SHIP
                                                                                                                             CATAOP
                                                                                                                             CATACE
395
                                                                                                                                            143
                           CALL HEAD
                                                                                                                             DATAGE
                                                                                                                                            144
                           WPITE (6,1110)
                                                                                                                             CATACP
                                                                                                                                            145
                                                                                                                                            146
                            NCTBY3 = 3
                                                                                                                                            147
```

```
07/31/79 23.53.41
    SUFFICULTINE DATAGE
                                   74/74
                                               CPT = 2
                                                                                             FTN 4.6+433
                                                                                                                           CATAGE
416
                           NCTBY1 = 1
                                                                                                                           CATAGE
                                                                                                                                         149
                  C
                           DO 129 I=1.NOSLB
                                                                                                                           DATACP
EATAOP
                                                                                                                                          150
                           ACOMP = ACCOMP(I)
WRITE (6,1120) lnEG(NCT)
KARAK = 1H+
                                                                                                                                          1 5 1
                                                                                                                           CATAOP
455
                                                                                                                           CATAGE
                                                                                                                                          153
                                                                                                                           DATAGE
                  C
                                                                                                                                          156
                           00 110 J=1, ACOMP
                           WRITE (6,114.) KARAK, INCC (NCT+1), CSTABLE (NCTBY3), CST/BEL (NCTBY1)
                                                                                                                           CATAGE
                                                                                                                                          1 56
                           NCT = ACT + 3
NCT8Y3 = NCT8Y3 + 3
NCT8Y1 = NCT8Y1 + 1
                                                                                                                           CALACE
                                                                                                                                          1 57
416
                                                                                                                           BATACE
                                                                                                                                          1 :9
                           KARAK = 1H
                                                                                                                           CALAGE
                                                                                                                                          1 6 6
                     119 CONTINUE
                                                                                                                           DATAOP
                                                                                                                                          1 61
                     120 CONTINUE
                                                                                                                           CATACE
                                                                                                                                          1 12
                           CALL HEAD HRITEEE, 1303) KZERO, NOFLY
415
                                                                                                                           CATAGE
                                                                                                                                          1 £ 3
                                                                                                                                          1 64
                    1103 FORMAT (A1.6 %, *LISTING OF THE *, 13. * COST ELEMENTS INCLIDED IN FLYA CATAOP 1MAY COSTS*)
                                                                                                                                          1 (5
                   166
                                                                                                                           CATACE
                                                                                                                                          1 67
                                                                                                                           CATACE
                                                                                                                           CATACE
                                                                                                                                          1 19
                                                                                                                           CATACP
                                                                                                                           CATACE
                                                                                                                                          171
                                                                                                                           CATAGE
                                                                                                                                          172
426
                                                                                                                           CATACE
                                                                                                                                          174
                                                                                                                           CATAGE
                                                                                                                                         1 75
                                                                                                                           CATAGE
                                     (43X,10 (3X, 46)))
                         C
                                                                                                                           CATACE
                                                                                                                                          177
                   1356 FORMAT (*-*,A10 / 1x,14H------- / 3x,*INCEx*,4x,*1*,11x,*2*,11x,*3*,11x,*4*,11x,*5*,11x,*6*,

11x,*7*,11x,*6*,11x,*9*,10x,*10* / }
63.
                                                                                                                           CATAGE
                                                                                                                                         178
                                                                                                                                          179
                                                                                                                           CATAGE
                                                                                                                                          163
                    1060 FORMAT (///)
1073 FORMAT (***,A10
                                                                                                                           CATACE
                                                                                                                                          1 6 1
                                                          1X.10H-----
                                                                                                                           CATAGE
                                                                                                                                          162
                    1084 FORMAT (19M6F CBS CLR CES .6(5x.*FAKAMETER #*,12) / 19M C ROW NO. XREF .6(5x.*(F = FACTOR)*)/)
1085 FORMAT (1x.A1,14,12,15,14,12,6(5x.A1,1FG12.6))
                                                                                                                           CATACE
                                                                                                                                          183
                                                                                                                           CATAGP
                                                                                                                                         184
                                                                                                                           CATACP
                    1099 FORMAT (11-,42x,*SHIP INSTALLATION SCHEDULE - *,
1*BASED CN*, 14.* SHIP FLEET* 1
1110 FORMAT (11-,51x,*EQUIPPENT ELEMENTS PER SHIP*/
1 110,52x,*LQUIPMENT*,5x,*OPERATIONAL*,5x,*INVESTMENT*/
                                                                                                                           CATAGE
                                                                                                                           CATAGE
                                                                                                                                          1 47
                                                                                                                           CATACR
445
                                                                                                                                          120
                                                                                                                           CATAGE
                    2 37x, *SMIP CLASS*, bx. *LLEHENT*, 7x, *QUANTITY*, 8x, *CUANTITY*)
1129 FORMAT (1HU, 36x, A6)
1140 FORMAT (A1, 53x, A6, 112, F18, 2)
                                                                                                                           CATAGE
                                                                                                                                          196
                                                                                                                           DATACP
                                                                                                                                         1 11
                           RETURN
                                                                                                                           DATAGE
                                                                                                                                          193
                                                                                                                           CATAGE
                                                                                                                                          154
                  C SECOND CALL CF DATAOP PRINTS FLEET TOTAL EQUIPMENT REGUIREMENTS
                                                                                                                           CATACP
                                                                                                                           DATACE
                                                                                                                                         156
                                                                                                                           CATAGE
                           ENTRY DATCES
                           CALL HEFO
HRITE (6,116.) FLEETZ
456
                                                                                                                           CATAOP
                                                                                                                           CATAGE
                                                                                                                                          159
                           00 130 I=1,ICCTR
                                                                                                                           CATAGE
                                                                                                                                          200
                           MRITE (6,1170) HAMESC(I,1), NAMESC(I,2), QUMPT(I), QCMPT2(I)
                                                                                                                           CATAOP
                                                                                                                                          261
                     130 CONTINUE
                                                                                                                           CATACP
                    1164 FORMAT (1++,42X, *EQUIPMENT ELEMENT QUANTITES - *,13, * SPIP FLEET SU CATACP ZMMARY*/1M),42X, *EQUIPMENT*,14X, *OPERATION AL*,10X, *INVESTMENT*/ CATACP
455
                                                                                                                                         263
```

| 30860 <i>t</i> | ITINE DATAOP | 74/74 | GPT=2 | FT14 4.6+433 | 67/21/75 | 23.53.41 |
|----------------|--------------|-----------|-------------------------|---------------|----------|----------|
| | 3 43) | ,+ELEHLN | T+,1 ex,+Quantity+, 13x | ,*OUTITHAUD*, | CATACE | 245 |
| | 1170 FOR | IAT (1Hú, | 38X,2{1X,A7},1:X,I7,1 | 3x,F1J.2} | EATACF | 216 |
| | FETL | FN | | | CATACP | 207 |
| 40. | END | | | | CATACR | 216 |

```
67/31/79 23.53.41
                                        -4/14
                                                                                                         FTN 4.5+433
      FUNCTION ICCPP
                                                    UFIE
                             FUNCTION ILONF (ISUB)
                                                                                                                                             ICCPF
                                                                                                                                             SYST
                   C
                       SYST
                   000000
                                                        - NAME OF THE SYSTEM
                                                                                                                                             SYST
 5
                               NYSYS
                                                        - TOTAL NUMBER OF SHIFTLASSES CONSICERED
- NAME OF THE SHIPTLASS IN THE HORDS
- INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
                               NOSUB
                               NHSUB ( , )
                                                                                                                                             SYST
                               NOCCHEL 1
                                                                                                                                             SYST
                                                       - INDEX NUMBER FOR EQUIPMENTS (CUMPING TOTAL FOR EQUIPMENTS)
- NAMES OF EQUIPMENT (2 MOPOS) FOR TITLES
IN MRSOUT (INGERFO BY EQUIPMENT NUMBER
AND SHIPCLASS NUMBER)
                                                                                                                                             SYST
                               NMCCMF( , , )
                                                                                                                                             SYST
                                                                                                                                                               10
14
                                                                                                                                             SYST
                                                                                                                                                               11
                                                           NAMES OF EQUIPMENT (2 MORDS, 7 CHARS EACH)
FOR EQUIPMENT QUANTITIES TABLE - FLEET
                               NAMESCO, F
                                                                                                                                             SYST
                                                                                                                                                               13
                   C
                                                                                                                                             SYST
                                                                                                                                                               14
                                                           SUMMARY
15
                                                        - PRESENT EQLIPMENT (BEING PROCESSED)
- PRESENT SHIPPLASS (BEING PROCESSED)
                                                                                                                                                               16
17
                                                                                                                                             SYST
                   000
                               SHIFNE
                                                                                                                                             SYST
                                                                                                                                             SYST
                                                                                                                                                               19
                                                                                                                                             SYST
                                            NAMES / NMSYS, NOSUB, NMSUB(2,43), NCCOMP(43), NMCOMP(4,10), 43), NAMESC(100,2), EQUI, SHIFAM
26
                             COMMON / NAMES
                                                                                                                                             SYST
                                                                                                                                             SYST
                            INTEGER EQUISHIFNM
                                                                                                                                                               23
                   C
                                                                                                                                             SYST
                                                                                                                                             SYST
                                                       - COUNT OF DIFFERENT APPROPRIATION CODES
- APPROPRIATION CODE NAMES
- PERCENTAGES FOR CBS ELEPENT COST SPLITS
                                                                                                                                             SYST
                   00000000
                               APPROL )
                                                                                                                                                               26
                                                                                                                                            SYST
                               SPCL( , )
                                                                                                                                                               27
                                                                                                                                             SYST
                                                        - COUNT OF THE LIFE CYCLE PHASES
- FIRST CBS ELEMENT NUMBER OF EACH FHASE
- CBS ELEMENT NUMBER FOR PAGE BREAKS
                                                                                                                                                               28
29
                               TPH( )
                                                                                                                                             SYST
                                                                                                                                                               30
3 C
                               IPB( )
                                                                                                                                             SYST
                                                        (LAST CBS NUMBER FOR THE PAGE)
- TITLES CF CBS PHASES
- FLEET (SYSTEM) SIZE
                   Č
                               IPHASE ( , )
                                                                                                                                             SYST
                                                                                                                                                               32
                                                                                                                                                               33
                               FLEETZ
                                                                                                                                             SYST
                               NFOLL ( )
                                                           LOWEST COST ELEPENT LEVEL TO BE PRINTED
35
                                                           (LOMEST LEVEL TO BE ROLLED UP NITHIN PHASE)
TOTAL ROTLE COST
TOTAL INVESTMENT COST HINUS TOTAL RIFOUT
                                                                                                                                            SAST
                                                                                                                                                               35
                   CCCC
                               ROTET
                                                                                                                                             TZYZ
                                                                                                                                                               36
                               TOTINV
                                                                                                                                                               37
                                                        - TOTAL RIFOUT COST
- HISSILE ROTLE COST
- NUMBER OF CBS ELLMENTS TO BE INCLUCED IN FLYAMAY COSTS
                               TOTRIE
                                                                                                                                             SYST
                                                                                                                                                               38
                                                                                                                                                               39
                               SMISRE
                                                                                                                                            SYST
                   CCC
                               NOFLY
                                                                                                                                                               40
                                                                                                                                             SYST
                                                                                                                                                               41
                                                        - CBS ELEMENT NUMBER FOR FLYAHAY COSTS
                               IFLYPCH( )
                                                                                                                                                               42
                   0000
                                                                                                                                            SYST
                                                       - UNIDER OF YEARS IN SHIP INSTALLATION TABLE
- YEARS COVERED BY THE SHIP INSTALLATION TABLE
- NUMBER OF YEARS IN SHIP INSTALLATION TABLE
PLUS ONE (COLUMNS FOR PRINTING SHIF/INST TABLE)
- FOCTNOTES FOR FIRST THO MAJOR OUTPLE CHARTS
                                                                                                                                             SYST
                                                                                                                                                               43
                               NOYES
                               IYE APS
                                                                                                                                            SYST
SYST
                                                                                                                                                               44
45
45
                               IYRS
                                                                                                                                             SYST
                                                                                                                                                               46
47
                   CCC
                                                                                                                                            SYST
SYST
                               FNOTES( . )
                                                                                                                                                               46
                             COMMON / HISC / NAP, APPLO(7), SPCL (3, 6, 2), NPH, IPH(4), IFB(3),
                                            IFMASE(2,4),FLEETZ,NROLL(4),RCTOT,TOTINV,TCTRIP,
SHISRD,HOFLY,IFLYROM(25),NOYRS,IYEARS(12),IYRS,
FNOTES(5,12)
                                                                                                                                                               FU
51
                                                                                                                                            SYST
                                                                                                                                            SYST
                                                                                                                                                               51
                                                                                                                                             SYST
                             INTEGER APPRO. SPCL. FLEETZ
                                                                                                                                            SIST
                                                                                                                                                               53
                   C
                                                                                                                                            SYST
                                                                                                                                                               54
                                                                                                                                            ICCMP
                             IF (ISU8.E0.1) GO TO 46
IS = ISU8-1
                                                                                                                                            ICCPP
                                                                                                                                            ICCFF
```

| | FUNCTION ICOMP | 74/74 | OPT = 2 | FTN 4.6+433 | u7/31/75 | 23.53.41 |
|---|--|-------|----------|-------------|---|-------------------------|
| u | DO 23 20 NCP = 43 ICOMF RETURI END | = NCP | () + NCP | | ICCHF ICCHF ICCHF ICCHF ICCHP | 7 8 9 10 11 |

```
FTN +. 6+433
                                                                                                                                                                                    67/31/79 23.53.41
    SLEPOUTINE REFIT
                                                   74/74
                                                                    0FT=2
                               SUBROUTINE REFHT (1WORD, (MCRO, NM
DIMENSION I WORC(1)
INTEGEF & CUI, TEMP(20), OMCFC(1)
NCMARS = 10*NHOS
EQUI = 10H
COMP1 = EQUI
INC = J
IBK = 1
00 5 I=1, RLHARS
5 TEMP(I) = 10H
00 30 I=1, NHOS
00 30 J=1, 10
CALL MCVE (IMOPU(I), J, EQUI, 1, 1)
IF (ECUI, NE, 1H) GO TO 10
IF (1BK, EQ. 1) GO TO 30
IBK = 1
GO TO 20
10 IBK = 0
20 INC = INC+1
CALL MCVE (EQUI, 1, TEMP(INC), 1, 1)
                                       SUBROUTINE REFIT (INORD, (WCRD, NWGS, ISHIFT)
                                                                                                                                                                                        REFET
                                                                                                                                                                                                                  3
                                                                                                                                                                                        REFFT
                                                                                                                                                                                        REFMT
REFMT
                                                                                                                                                                                                                  5
                                                                                                                                                                                        REFFT
                                                                                                                                                                                        REFFT
                                                                                                                                                                                        REFET
                                                                                                                                                                                        REFFT
REFFT
                                                                                                                                                                                                                 11
12
10
                                                                                                                                                                                        REFET
                                                                                                                                                                                                                 13
                                                                                                                                                                                        REFET
                                                                                                                                                                                                                14
15
                                                                                                                                                                                        REFFT
                                                                                                                                                                                                                 16
15
                                                                                                                                                                                        REFMT
REFMT
                                                                                                                                                                                                                 17
                                                                                                                                                                                                                18
19
                                                                                                                                                                                        REFET
                                                                                                                                                                                                                21
21
22
                                                                                                                                                                                        REF#T
REF#T
                                GALL MCVE (EQUI,1,TEMP(INC),1,1)
3C CONTINUE
21
                                                                                                                                                                                        REFPT
                                       IF (IBK.EQ.1) INC=INC-1
IF (INC.EQ.-1) GO TO 40
ISKIF = 0
                                                                                                                                                                                                                23
24
25
                                                                                                                                                                                        REFET
                                                                                                                                                                                        REFET
                              ISKIP = U
IF (ISFIFT.EQ.1HC) ISKIP = (NCHARS-INC)/2
IF (ISFIFT.EQ.1HR) ISKIP = NCHARS-INC
ENCOGE (10,1C4,1FHT) ISKIP,INC
100 FORMAT (1H(,1Z,2Hx,,1Z,3HA1))
100 FORMAT (1H(,1Z,2Hx,,1Z,3HA1))
                                                                                                                                                                                        REFFT
                                                                                                                                                                                                                26
27
25
                                                                                                                                                                                        REFFT
                                                                                                                                                                                                                 28
                                                                                                                                                                                        REFPT
REFPT
REFPT
                                                                                                                                                                                                                29
3ú
31
                                       ENCODE (NCHARS, IFHT, OHORD) (TEMP (I), I=1, INC)
                                       RETUEN
                                                                                                                                                                                        REFMT
REFMT
REFMT
                                                                                                                                                                                                                32
33
34
35
                         C
                                                           A BLANK HORO HAS BEEN FOUND RETURN A BLANK
                                40 CONTINUE
                         C
                                                                                                                                                                                        REFFT
                                      00 50 I=1,NWOS
OWORC(I) = COMP1
CONTINUE
                                                                                                                                                                                        REFET
                                                                                                                                                                                                                36
37
3.5
                                                                                                                                                                                        REFPT
                                       RETURN
                                                                                                                                                                                                                 39
                                                                                                                                                                                        REFPT
                                       ENO
                                                                                                                                                                                        HEFPT
                                                                                                                                                                                                                 40
```

عنقوية المداف والمستعودة وعدان والاستان والماسية المتابعة المتابعة

MOVE.2 STORAGE ALLOCATION.

CCHPASS 3.3-42.. 07/31/79 23.54.37.

ADDRESS LENGTH

BIHARY CONTROL CARDS.

υ 54 74 IDENT MOVE.2

ENTRY POINTS.

MGVE

1+

| | | | ID. NT MUVL . 2 | MUVL.2 | HOVE | |
|------|-----------------------|------------|-----------------|--|--------------|----------|
| | | • | AUTHOR | AUTHOR I, HARRIS | HOVE | |
| | | | UAIE8 4074 | 7.0 | AUVE ROVE | |
| | | • | HUVE | - POVES NOCHAR"S FROM INPUT ADDRESS AMUNDAGHAR | MONE | |
| | | • | ! | TO DUTFUT ADEKLSS FACKOFBCHAM. | HOVE | |
| | | | 41.47 | THE SOM SERVE STORE SERVE COSTER SHOW THE SERVE STORESTED SERVES | HOVE | |
| | | | CALLING | SEMUENCE CALL DOVE TANGED FURFICACIFICATION SECURALISMS | MOVE | - |
| | | | > - | MOVE | HOVE | - |
| ٠. | 1517260555555600001 + | 40.0 | VFD BAS7 | 42/7LMCVE ,18/MUVE | HOVE | → - |
| ۰ ۸ | £114863801 | | 581 | 2 | HOVE | • |
| 1 | 66200 | | 585 | 18 | MOVE | - |
| ** | 10011 | HOVE 1 | BXD | XX | HOVE | - |
| | 54111 | | SA1 | 461 | MOVE | |
| 4 | 53210 | | SA 2 | X 1, TOVE C | HOVE | - |
| • | 645000000 + | | €0 | HOVE 3 | MOVE | ~ |
| φ, | 01421 | HOVE 2 | 2 i | XX | HOVE | ~ . |
| ۵ | 7130000012 | MUVES | ? 4 2 2 | 1.C | 200 | , |
| | 70572 | | Z X Z | 7% 000 | HOVE | ۱ ۸ |
| ~ | | | P x 3 | Bu,x2 | MOVE | Ň |
| | 44435 | | FX4 | X3/X5 | HOVE | Ň |
| | 26544 | | 5 X 2 | 84. X4. | MOVE | ~ ^ |
| 35 | 36453 | | 1 × 4 | n v a fr | HOVE | ۰ م |
| 1 | 10533 | | BXS | £ X | HOVE | m |
| | 20533 | | L X 5 | | HOVE | m) (|
| ; | 36554 | | 1 X Z | X5+X4 X3 - XE | NO VE | M) N |
| : | 0314000013 + | | N 2 N | | HOVE | 7 |
| | 76510 | | 5 15 | 91 | MOVE | 100 |
| 12 | 37335 | | E X I | XX-XX | HOVE | M |
| ; | | ** ******* | z x x | | HOVE | m, . |
| 2 | 195000000 | MUVE 3A | 2 E | U.C. BULVE 4 | HOVE HOVE | n 10 |
| | 7721 | | Bx7 | | KO VE | , , |
| 1 | | | LX4 | | HOVE | 3 |
| | 36.277 | | 2 X Z | Lx+Lx | MOVE | 3 |
| | 36542 | | . X I | ************************************** | MOVE | . |
| 15 | | | SA 1 | A1+63 | HCVE | • • |
| | 66 2 1 0 | | SB2 | 9.1 | MOVÉ | š |
| ; | EE 401 | | 8×7 | ~~ | MOVE | |
| £ \$ | | 3 (30 | , E | | NOVE NOVE | 3 |
| : | 10.166 | | 3 X X | 9 | 30 A | 7 6 |
| | 19377 | | BX 3 | ~× | NO VE | , ic |
| à | 1.713 | | 8×7 | ~~ × | MOVE | 6 |
| 2 | 10544 | | 3 x x | ************************************** | MOVE | . |
| | 34.46 | | 7 × 7 | 3×1×4× | # 0 A | , i |
| | 36543 | | 5 X I | | NO CH | |
| 7. | F170c6u374 | | 587 | | HOVE | . 10 |
| | 63c5J | | SFB | SX | HOVE | š |

| H7 - RF | 81 + 131 | X 3, MOVE 5 | X3 | HOVEE | 57 X | × | 9 | 98 | 9 | | X1, MOVE 7 | X1 + X0 | | 4.2 | | 1 7 4 7 7 1 | 7 7 X | - X X - X - X - X - X - X - X - X - | 140.47 | K2.MCNF9 | X2+X2 | * | 65, 14 | ADVE 1.0 | | 2×3×1 | x2+x7 | X5+X2 | r.x | 85 • X4 | サメルガメ | 86 y X6 | Bč, X3 | 5X+0X- | XS+X6 | 18+81 | 67 ,85 ,MOVE 12 | 181 | J | X 1, HUVE 11 | מי של או | 1 × 11 | FUVE 1.6 | , | | 07777 | *** | 14 | 40-00 40-00 | of 1404 no 100 | X5 | *P*/8 | XZ, HUVE 14 | | | HOW: 15 |
|---------|----------|-------------|-----|--------------|-------|--------|-------|-------|-------|-------------|------------|---------|-----|--------------|------|-------------|-------|-------------------------------------|----------------|-------------|-------|-------|--------|---------------|-------|-------|-------|-------|-------|---------|---------|----------|--------|--------|-------------------|-------|-----------------|-------|-----|--------------|----------|--|--------------|---------|-------|--------|-------|--------|---|----------------|--------|---|--------------|--------|-------|--------------|
| 447 | 3 4 | و 2 | SAL | ה. מי | £X¢ | SB 3 | MX 3 | SH2 | LX 3 | SBC | 2 | 12 | 745 | į - | 7 4 | , A | : X | À | * * * | V 2 | 2.2 | SAS | × | | Z X | B X 2 | 1x 2 | 8X 2 | RX S | TX4 | 9 x 6 | r x e | LXU | 8 X S | 9 X 5 | SB5 | و | 3 X X | 200 | : غ | 7 X 7 | \$ 1 4 1 | 2 2 | # Y | , , | T × 0 | 4 3 | £ 4 | 9 4 | | N C | 9 0 | 2 5 | 2 4 6 | S 4 5 | 3 |
| | | | | | HUV15 | MCVL6 | | | | | | | | | 4004 | | | | | MOVEA | | | | | HOVES | | | | | | MOVE 10 | | | | | | | | | | | | | HOVE 11 | | | | CHANGE | 77100 | | MUVELS | | | | | |
| 46.35.3 | 91010 | 0333000024 | | 0403304025 + | 11443 | £ 3340 | 43336 | 66200 | 2,316 | 61400000006 | 0331603830 | 36410 | | * CEU1030070 | | 10401 | 01191 | 17100 | 16171 16171 | + 710000121 | 16223 | 53523 | 22454 | 04.000.000.00 | | 15225 | 36227 | 12252 | 61452 | 22 454 | 11634 | 22 € ¢ 6 | 22163 | 15550 | 1255 & | 66554 | + 5500.005/90 | 1010 | | + 250:001cco | 36118 | | + **0.0070*0 | 10404 | 411CT | n Troc | 16131 | 1441 | 0.5000000000000000000000000000000000000 | | 13633 | 7 | + /50.002550 | 0.0040 | | + 1:0:370040 |

| 9 | MUVE 14 | Sx7 | 81 | | | NO VE |
|--------------|--------------|-------|----------------|--------|------------|-------|
| 01562 | | X | x2 | | | HOVE |
| 43501 | | | - | | | HCVE |
| 15225 | | | -x5+x2 | | | MOVE |
| 16227 | | | X2+X7 | | | HOVE |
| 12252 | | | X5+X2 | | | HOVE |
| 01452 | | | X2 | | | MOVE |
| u003001 + | MUV.15 | | E1,80, HCVE | | | ROVE |
| 66221 | MUVLI6 | | 82+61 | | | HOVE |
| 21466 | | | 9 | | | HOVE |
| 0723601936 + | | = | 62,83,HOVE 1J | | | HOVE |
| E610G | | 561 | . 08 | | | MOVE |
| P4030403045 | | 60 | HUVL 13 | | | MOVE |
| | | END | | | | HOVE |
| SGBCBE CM | STORAGE USED | JSE 0 | 128 STATEMENTS | EPENIS | 16 SYMBCLS | |

07/31/75 23.54.37.

COMPASS 3.3-421.

H0V: •2

 ξ ^γ

COMPASS 3.3-42.. L7/31/79 23.54.37. MOVE .2 SYMBOLIC REFERENCE TABLE. PROGRAM* PROGRAM* FRCGFAM* 2/11 2/47 3/32 L 3/45 3/44 4/03 L 2/20 L 2/21 L 2/27 L 2/37 L 2/37 L 3/16 L 3/07 L 3/16 L 3/26 L 1 3 36 2/1J E 2/15 L 3/25 3/41 3/38 3/52 L 3/57 3/51 2/19 2/33 2/37 3/15 3/15 3/15 3/15 2/12 L MOVE 4/:8 MCVE1 4/11 MOVE 12 MOVE 12 MOVE 13 42 44 45 47 PROGRAM* 3/50 L MUV-14 MUVF 15 MUVF 16 FROGE AN 51 52 PROGFAM* S TVOM E JVOM ASEVOM PROGRAM* PROGRAM* PROGRAM* 5 6 13 17 24 25 3,1 32 34 MOVE MOVE PROGFAH* PROGFAH* PROGFAH* PRCGF AM*

The state of the s

MCV1 t MCVLS

FROG! AN*

Some state of the same of the

一年、日本の日本の大学の一年の日本の一日

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FTN 4.E+433
                                                                                                              47/31/79 23.53.41
   SUFFICE THE COPPONE
                                74/74
                                           OFT=2
                                    FNOTES(5, 12)
                                                                                                                 SIST
                                                                                                                               52
53
                        INTEGER APPROISECLIFLETZ
                                                                                                                 SYST
 61
                C
                                                                                                                 MSE
                                                                                                                                2
                        ****** MS (LENGTH AND COUNTER) C (MHON ************
                                                                                                                 PS2
                                                                                                                                5
                                                                                                                 MS2
                CCC
                                             - HASS STORAGE UNITS CUMMON RECORD LENGTH
                                                                                                                 HS2
                          LENR
 65
                                             (TYPICALLY 15C)

NUMBER OF ELEMENTS IN THE COS (MAX 150)

NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                 C
                          NWBS
                                                                                                                 FS2
MS2
                                                                                                                                8
                          ICCTR
                                                ELEMENTS TABLE
                                                                                                                               10
                                                                                                                 rs a
                                                (150 WORDS) FECORD LENGTH OF 7 ARRAYS IN THE "CERVLS" COPHCN
                                                                                                                               11
 70
                          L158
                                                                                                                 PS 2
                                                                                                                 PS2
                          L906
                                                (900 HORES) FECORD LENGTH OF 2 ARRAYS
                                                                                                                 rs 2
                                                                                                                               13
                                                IN THE "CERVLS" COMMON
                                                                                                                               14
15
                                                                                                                 MS2
                                                                                                                 PS2
                 C
 75
                        COMMON / MS2 / LENK, NHBS, ICCTR, L153, L190
                                                                                                                 FSZ
                 C
                                                                                                                 MS Z
                                                                                                                               17
                                                                                                                 MS 2
                                                                                                                               18
                                                                                                                 KPUT
                                                                                                                                2
                 NEL 1
 S C
                 C VARIOUS CTHER ARRAYS ARE EQUIVALENCED TO THE "ARRAY" ARRAY AS INC
                                                                                                                 NEUT
                                                                                                                 KEUT
                       SLCCM & ROW = ARAY(1,1)
BUGGET & CG = ARAY(1,2)
INPUPO & IOREC = ARAY(1,1)
                                                                                                                 NELT
 PE
                                                                                                                 NPLT
                                                                                                                                8
                                                                                                                 NEUT
                       COMPCHP | ROH
                                                                                                                 NPL 1
                                                                                                                               10
                                                                                                                 KPLT
KPU T
                       APCELM I IRAY
                                           = ARAY (1.1)
                                                                                                                               11
12
                 C
 96
                        COMMON / NEUT
                                               / ARAY (150.2)
                                                                                                                 NPLT
                 C
                                                                                                                 NPL 1
CHAFTS
                   CHIFTS
                                                                                                                 CHAFTS
 95
                          CHRICAT CUNTAINS THE MAJOR OUTPUT CHART CONTROLS
                                                                                                                 CH# FTS
                 C
                                             - GENERATE CHAFT
                                                                                                                 CHAFTS
                                             - NO GENERATION OF CHART
                                                                                                                 CHAITS
                                        1
                                                                                                                 CHAFTS
                                             - IF LOUAL TO 0 - CALLS WESCUT(1) FCR EQUIPMENT ELEMENT LIFE CYCLE COSTS - FLEET SUPLARY
- IF EQUAL TO 0 - CALLS WESCUT(2) FCR UNIT SHIP COSTS BY EQUIPMENT ELEMENT
- IF NE. TO 0 - CALLS WESTOT B_CAUSE WESCUT(2) WAS NOT CALLED
136
                          CHRTCAT (1)
                                                                                                                 CHAFTS
                                                                                                                               10
                                                                                                                 CHAITS
                                                                                                                               11
12
                          CHRTCAT (2)
                                                                                                                 CHAFTS
                                                                                                                 CHARTS
                                                                                                                               13
                                                                                                                 CHAFTS
                                                                                                                               14
195
                                                                                                                 CHASTS
                                                                                                                               15
                 C
                                                                                                                 CHAFTS
CHAFTS
                                                                                                                               16
                          CHRICKT(3)
                                                IF EQUAL TO U - CALLS WESOUT(3) FOR SHIP
                                                CLASS SUMMARY
                                                IF ECUAL TO 0 - CALLS BLOGGF FOR LIFE
CYCLE COSTS BY BUDGET AFPROPRIATIONS
IF NE. TO 0 - CALLS ROLONT FOR CUTFUT EY
                                                                                                                 CHARTS
                                                                                                                               18
19
20
                 CCC
                          CHRTCAT (4)
116
                          CHRICAT (5)
                                                                                                                 CHAFTS
                                                ROLL-UF NUMBER
                                                                                                                 CHAFTS
                                                                                                                               21
                 C
                                                IF EQUAL TO 0 - LISTS THE SUBELS ARRAY FOR ENTIFE CES FOR PROOFING
                                                                                                                CHAFTS
CHAFTS
                          CHRICAT (6)
                                                                                                                               22
                 C
                                                                                                                               23
                                                                                                                 CHEFTS
```

| JUGEN | UTINE COMPCMP 14/74 | OF T=2 | FTN ++6+433 | 67/31/79 | 23.53.41 |
|-------|---------------------|----------------------|-------------------------------|----------|----------|
| 115 | С | | | CHAFTS | 25 |
| ••• | COMMON / CHAKT | S / CHRTCHT(15) | | CHAFTS | 26 |
| | INTEGER CHATCH | | | CHARTS | 27 |
| | C | • | | CERVES | 2 |
| | č | | | CERVLS | 3 |
| 12, | | ESTIMATING RELATION | SHIP (CER) VALUES) COMMON *** | | i. |
| •1 | C C | | | CERVLS | 5 |
| | | MUN CUNTAINS LOCATIO | INS FCR STORAGE OF THE CER | CERVLS | 6 |
| | | | R EQUATION NUMBERS, THE | CENVLS | 7 |
| | | | PARAMETERS, THE ACCITION | CENVLS | ۵ |
| 125 | | | ITHENT NAME . GER INDEX. | CERVLS | 9 |
| • | | XES FOR ALL EQUIPMEN | | CERVLS | 10 |
| | Ċ | | | CERVLS | 11 |
| | C CERCT | - NUMBER OF CEP'S | FOR THIS FARTICULAR EQUIPMENT | CERVLS | 12 |
| | C | (1 HQED) | | CENVLS | 13 |
| 1 56 | C IFONC() | - (F OR C) ALPHABE | TIC CHARACTER INDICATING | CERVLS | 14 |
| | Ċ | 'FACTOR' OR 'CEH | | CERVLS | 15 |
| | C IROWIE | - CBS ELEMENT NUMB | ER TO WEICH THIS CER APPLIES | CERVLS | 16 |
| | C | (150 HORCS) | | CENVLS | 17 |
| | C IAOD | - CER CONTROL FLAG | S (0 THRU 6) FCF ACDITIVE | CERVLS | 18 |
| 135 | C | CERS OR SUBELEME | NTS. 8 INGICATES NO ADDING. | CERVLS | 19 |
| | С | 1 THKU 6 IADICAT | E ADO UF SUBELLPENTS. | CERVLS | 23 |
| | C | (150 WORDS) | | CEMVLS | 21 |
| | C IGERNO | - REFERENCE NUMBER | FOR CER EQUATIONS IN THE | CERVLS | 22 |
| | С | 'CERCOMP' SUEROL | ITINE. (150 WORCS) | CERVLS | 23 |
| 140 | C IXREFNO | - CBS ELEMENT NUMB | ER USED IN CROSS REFERENCING | CERVLS | 24 |
| | С | A PREVIOUSLY COM | PUIED COS ELEMENT. AT PRESEN | T CERVLS | 25 |
| | Ċ | CNLY CER EQUATION | A NUMBER & ALLCHS CRESS | CEFVLS | 26 |
| | C | REFERENCING. 0 | INDICATES NO CROSS-REF. | CEÁVLS | 27 |
| | C | (150 HORCS) | | CEFVLS | 85 |
| 1 45 | C IXREFAD | - LER CONTROL FLAG | S FOR CROSS-FEFERENCING | CEAVLS | 29 |
| | С | CER SUB-ELEMENTS | . (150 HORDS) | CEFFLS | 20 |
| | C IFSTOLE | - STORES 'FACTOR' | PARAPETERS. (900 WORCS) | CEMVLS | 21 |
| | C PSSTOPE | - STORES NUMBERICA | L FARAMETERS. (900 WGROS) | CERVLS | 32 |
| | C ICER() | - A SINGLY-SUBSCRI | PTED ARRAY CONTAINING A | CEFVLS | 23 |
| 150 | C | MAXIMUM OF 160 C | ATA THIFLETS WHOSE MEMBERS | CÉRVLS | 24 |
| | C | AREI | | CERVES | 35 |
| | C ICE+(1,4,7, | - EQUIPMENT NAME | | CERVLS | 36 |
| | C ETC) | | | CEFVLS | 27 |
| | C ICE+12,4,6 | - INDEX FOR MASS S | | CEAVLS | 38 |
| 1 45 | C ETC) | | INCREMENTS BY 9 (1,10,19, | CEFVLS | 39 |
| | С | | ING DATA RECORDS ARE | CEPVLS | 4.0 |
| | С | INDEXEDI | | CERVLS | 41 |
| | c | 1 CERCT | 6 IXFEFNO | CERVLS | 42 |
| | C | 2 IFOKC | 7 IXREFAD | CEFVLS | 43 |
| 1.62 | C | 3 IRODIC | 8 IFSTCHE | CERVLS | 44 |
| | Ç | 4 IAOO | 9 FEST CPE | CERVLS | 45 |
| | <u>C</u> | 5 ICEANC | | CEAVLS | 46 |
| | G ICEF 13.6.4 | | TOFAGE UNIT 2 AND 1. | CERVLS | 47 |
| | <u>ç</u> | | 18 AND INCREMENTS BY 2 | CERVLS | 48 |
| 165 | Ç | | NO IS IDENTICAL TO THE | CERVLS | 49 |
| | Ç | | DATA TRIPLET STORED IN | CENVLS | 50 |
| | C CURSIAL A | THE IREC ARPAY. | | CERVLS | 51 |
| | C SUBELS(,) | | S-HAICHED ARRAY WHICH IS | CERVLS | 52 |
| . • . | ç | RELATED CHE-TO-C | | CERVLS | 53 |
| 170 | C | | LY HITHIN 'COMPCHE' AND | CERVLS | 54 |
| | C | CERCOMP FOF IN | ITERIM STORAGE OF UP TO | CEAVLS | 55 |

```
0FT=2
                                                                                        . FTN 4.6+433
                                                                                                                       07/31/79 23.53.41
    SUBBULTINE COMPOMP
                                 74/74
                                                 SIX SUBELEMENTS, 1 THRUFUT, AND 1 TOTAL VALUE FOR EACH CBS FLEMENT.

- A FACTOR IS A PRECURSOR OF GME CR MORE
                  ٤
                                                                                                                          CEAVES
                                                                                                                          CENVL S
                  C
                  C
                            FACTORE 1
                                                                                                                          CERVLS
                                                                                                                                         50
                                                                                                                          CERVES
175
                                                    CERS.
                                                                                                                                         59
                                                                                                                          CEFVLS
                                                                                                                                         έā
                  C
                  C
                                                                                                                          CENVLS
                          CEAVLS
                                                                                                                                         €2
166
                                                                                                                          CEFVLS
                                                                                                                         CERVLS
                                                 SUBELS (8,153) . FACTORS (158)
                                                                                                                                         £5
                          INTEGER CERCT
                  C
                                                                                                                          CENVLS
                                                                                                                                         €7
                     C
                                                                                                                          CERVLS
CERVLS
                                                                                                                                         6.8
                                                                                                                                         69
135
                  C
                                                                                                                          CCFFCMF
                          DIMENSION ROW(150)
                                                                                                                          CCFFCMF
                                                                                                                                         15
                  C
                                                                                                                          COMFCMP
                                                                                                                                         16
                          EQUIVALENCE ( ROW, ARAY(1, 1) )
                                                                                                                          CCPFCFF
                                                                                                                                         17
                                                                                                                          COMPONE
                                                                                                                                         18
19
190
                  c
                                                                                                                          CCFFCFF
                           INTEGEN GCUAN, CERCTX6
                          OATA IIPRIM / 3455212211150000000000 / DATA IIMAWY / 345516012631000444008 / DATA IIMAMM / 345515011515000000000 /
                                                                                                                          CCFFCMF
                                                                                                                         COPFCHE
                          OATA IICANN / 3455030116160000000000 / DATA IIMLCH / 345515140310000000000 / OATA IZGAMM / 355507011515000000000 /
195
                                                                                                                          CCFFCHF
                                                                                                                                         23
                                                                                                                          CCFPCFF
                                                                                                                                         24
25
                                                                                                                          COFFCPP
                   DATA IEFCS / 415506032355030C000000 /
2222 FORMAT (4H-** /4H ** ,A10,* CERCT = *,I5,* **,021,5x,16/4H ** )
                                                                                                                          CCFFCMF
                                                                                                                                         26
                                                                                                                          CORFCEP
                                                                                                                                         27
                                                                                                                          CCPFCPF
                                                                                                                                         85
                          READ THRUPUTS AND INPUTS
                                                                                                                         COMPCME
                                                                                                                                         33
                           CALL READMS ( 3, ROW, NHBS, NEXMS )
                                                                                                                          CCFFCHF
                                                                                                                                         31
                          CALL READMS ( 3, AMAY (1,2). LENR, NOXMS+1 )
                                                                                                                          CCPFCMF
                                                                                                                          CCFFCMF
2 . 5
                                                                                                                                         33
                  C INITIALIZE THE CUMMON "SUBELS" & "FACTORS" ARRAYS TO ALL ZERUES: C PUT TPUTS IN "SUBELS (7,x)" AND "SUBELS(8,x)" FOR TIME-PHASING.
                                                                                                                          COFFCFF
                                                                                                                          CCFFCFF
                                                                                                                                         35
                                                                                                                          COPFCME
                                                                                                                                         36
                                                                                                                          CCFFCMF
                                                                                                                                         37
                          FACTCRS(12) = 1.
00 1 11=1.8
                                                                                                                          CCFFCMF
216
                                                                                                                                         36
                                                                                                                                         19
                           SUBELS ( 1, 12) = J.
                                                                                                                          CCFFCHF
                                                                                                                                         40
                        1 CONTINUE
                                                                                                                          COPFCPF
                                                                                                                          COFFCFF
                        2 CONTINUE
                                                                                                                                         42
43
                          00 4 13=1,NW8S
SUBELS(7,13) = KOW(13)
SUBELS(8,13) = MCW(13)
                                                                                                                          COPPCHE
                                                                                                                          CCFFCMF
                                                                                                                          CCFFCFF
                                                                                                                                         45
                        4 CONTINLE
                                                                                                                          CCFFCFF
                                                                                                                                         46
                  C
                                                                                                                          CCFFCFF
                                                                                                                                         47
221
                                        READ IN CER DATA
                                                                                                                          CCFFCMF
                                                                                                                                         40
49
                          CALL REACHS ( &, CERUT, 1, NOXCER )
IF (CFFCT,GT.1) GO TO 5
GO TO 10
CERCTXE = CERCT * 6
                                                                                                                          COMPCAF
                                                                                                                          CCPFCPF
                                                                                                                         COPPUME
                                                                                                                                         51
52
                                                                                                                         CCFFCMF
                          CALL READHS (8, IFOPC , CEPCT , NOXCER+1)
CALL READHS (8, INGMID , CERCT , NOXCER+2)
CALL REAGHS (8, IADD , CERCT , NOXCEF+3)
CALL REAGHS (8, ICERNG , CEPCT , NOXCER+4)
225
                                                                                                                                         53
                                                                                                                         CCFFCFF
                                                                                                                                         54
55
                                                                                                                          COFFURF
                                                                                                                         CUPFCFF
```

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u7/31/79 23.53.41
                                                                                                                      FTN 4.6+433
                                             74//4 Gi T= 2
     SUBFOLTINE COPPCHP
                       CALL PEAUMS (0, IXALFHC, CLRCT , NDXCEN+5)
CALL READMS (8, IXALFAU, CLRCT , NDXCEN+6)
CALL READMS (8, IESTONE, CERCTXE, NDXCER+7)
CALL FEAUMS (8, PSSTORE, CERCTXE, NDXCEF+4)
C TEST FON SPECIAL CUMP*S, 1 FRINE AND 1 NAVY
                                                                                                                                                             CCFFCMF
                                                                                                                                                              CCPFCMF
                                                                                                                                                                                  58
230
                                                                                                                                                             CCFFCMF
                                                                                                                                                                                  54
                                                                                                                                                             CLIFCHE
                                                                                                                                                                                  €ĵ
                                                                                                                                                              COPFCMF
                                                                                                                                                              CCMFCMF
                                                                                                                                                                                  €2
                                  IF (EQUI.EQ. I1 FRIP) GC TO 40 IF (EQUI.EQ. I1 NAVY) GO TO 50
                                                                                                                                                              CCFFCHP
                                                                                                                                                                                  €3
235
                                                                                                                                                              COPFCHF
                                                                                                                                                              CCPFCPF
                                                                                                                                                                                 €5
                                  GO TC ED
                                                                                                                                                              CUPFCHF
                                                                                                                                                                                  €6
                                                                                                                                                              CCPFCPF
                                                                                                                                                                                  €7
                                                        1 PHIME
                              CEFINE AGGREGATE MBS COSTS OF 1 FRIME. MBS ELEMENTS
FOR 1 FRIME ARE BASED ON PERCENTAGES OF ALL FREVIOUS
MBS COMPENENT ELEMENTS AT A PARTICULAR MBS LEVEL.
                                                                                                                                                              CCPFCPF
                                                                                                                                                             COPFCYF
                                                                                                                                                                                 69
                                                                                                                                                              CCFFLEP
                        ** WAS COMPENENT ELEMENTS AT A PARTICULAR WES LEVEL.

4. POM(11) = ...b.>*ROTOT + 2.

ROM(12) = .13.4*ROTOT

ROM(14) = .10.4*ROTOT

ROM(16) = ...2.3*ROTOT + 1...31

ROM(20) = ...d.2**(10TINV - TOTRIF)

2226 FORMAT(1M3,*TOTINV = *,F10.2,5%,*TOTRIF = *,F10.2,5%,

1*ROM(20) = *,F10.2)

PRIFE(6.22261 | UTILING TOTATE, ROM(20)
                                                                                                                                                             CCFFCFF
                                                                                                                                                                                 71
                                                                                                                                                             CUPFCMF
245
                                                                                                                                                                                 74
75
                                                                                                                                                             CCFFCMF
                                                                                                                                                             COFFCRE
                                                                                                                                                              COPPCMF
                                                                                                                                                              COMPCHE
                                                                                                                                                                                 77
78
                                  WRITE(6,2226) TOTINV, TOTRIP, ROW(20)
                                                                                                                                                              COFFCFF
25.
                                  GO TO EO
                               *********
                                                        1 NAVY
                                                                        ************
                                                                                                                                                             COMPORE
                                                                                                                                                                                 Êμ
                              DEFINE AGGREGATE HIS COSTS OF 1 NAVY. WBS ELEMENTS
FOR 1 NAVY ARE HASED ON PERCENTAGES OF ALL FREVIOUS
HBS COPPONENT ELEMENTS AT A PARTICULAR HBS LEVEL.
                                                                                                                                                             CCFFCMF
                                                                                                                                                                                  £1
                                                                                                                                                              CCFFCHF
                                                                                                                                                                                  €3
                             5U ROW(11) = .142*(RUTOT + SHISHC)
ROW(14) = .071*(ROTOT + SHISHC)
ROW(20) = .1*(TOTINV - TOTRIF)
                                                                                                                                                             COMPONE
                                                                                                                                                                                 €4
85
                                                                                                                                                              COPFCKF
                                                                                                                                                              COFFCHP
                                                                                                                                                                                  86
                             EJ CONTINUE
                                                                                                                                                              COFFCHP
                                                                                                                                                                                  27
                                                                                                                                                              COMPCHE
263
                                                    EVALUATE THE RCW ELEMENTS IN THE CERCHP ROLTINE
                                                                                                                                                              COMPCHE
                                                                                                                                                             CCMFCMF
                       C
                                                                                                                                                                                  ςú
                                                                                                                                                              CCFFCMF
                                  CALL CERCHE (19.ROH, QQUAN, QZ)
                                                                                                                                                             COMPCHE
                                                                                                                                                             CCFFCFF
265
                                                                                                                                                                                  43
                                      CCFFCMF
                                  CALL FILLUP (KOH)
                                                                                                                                                              CCFFCMF
                                                                                                                                                                                  çs
                                                                                                                                                             COMPCHE
                                                                                                                                                                                  95
                                                                                                                                                              CCFFCMF
                                  IF (EQUI.EQ.IIPAMP) GO TO 303
IF (EQUI.EQ.IICANN) GO TO 303
IF (EQUI.EQ.IIPLGH) GO TO 300
270
                                                                                                                                                              CCFFCMF
                                                                                                                                                             COFFCHE
                                                                                                                                                                                 99
                                                                                                                                                              CCFFCFF
                                  IF (EQUI.EQ.12 GAMM) GO TO 300
IF (EQL1.EQ.16FCS) GO TO 30:
ROTOT = ROTOT + ROM(1)
                                                                                                                                                              COFFCHE
                                                                                                                                                                                101
                                                                                                                                                                               162
163
                                                                        GO TO 360
                                                                                                                                                             CCFFCRF
                        IF (£01.1.EQ.16FCS) GO TO 300

#OTOT = ROTOT + ROM(1)

GO TC 403

300 SMISHO = SMISHO + ROM(1)

400 TOTINV = TOTINV + ROM(18)

TOTRIP = TOTHIF + ROM(36)

2225 FORMAT(1M0,*TOTINV = *,F10.2,5×,*TOTRIP = *,F10.2,5×,

1*POTCT = *,F10.2,5×,*SMISHO = *,F10.2)
                                                                                                                                                              COFFCEP
2.75
                                                                                                                                                             CCFFCFF
                                                                                                                                                                               164
                                                                                                                                                             CCFFCFF
                                                                                                                                                                               1 45
                                                                                                                                                              CCFFCHF
                                                                                                                                                             CCFFCFF
                                                                                                                                                                               147
                                                                                                                                                             COMPCEP
256
                                                                                                                                                                               138
                                                                                                                                                             CCFFCFF
                                                                                                                                                                               109
                                  WRITE(6, 2225) TOTINV, TOTRIP, KOTOT, SMISKE
                                                                                                                                                             CCFFCMF
                                                                                                                                                                               110
                                                                                                                                                             CUMFCHE
                             10 CONTINUE
                                                                                                                                                                               111
                                                                                                                                                             CCFFCFF
                                  IFICERCT.EG. 8) (ALL RCLLUP (ROW)
                       c
2 15
                                                                                                                                                             LLFFCMP
```

```
07/31/75 23.53.41
                                                                                                       FTN 4.0+435
    SUPPOUTING COMPONE
                                      74/74
                                                 0PT=2
                                                                                                                                         COMPCHE
                    C LIST THE "SUBLES" ARRAY FOR PROGRAP PROVING
                                                                                                                                         COPPCMP
                                                                                                                                                         1 15
                                                                                                                                         CCFFCHP
                                                                                                                                                         116
                              IF (CHRICHT(6).Nt.u) GO TO 30
                     IF(CHRIENICO). NE. 00 CALL HEAD
CALL HEAD
WRITE (6,1111) NAMESC(19,1), NAMESC(19,2), (M.M=1,0)

1111 FORMAT (*OAFTER "CLRCHP" AND BEFORE "TYMFA2" LIST THE "SUBELS"*,

C * ARMAY FROM "COMPONE" FOR COMPUNENT *,47,* *,47 /

C * OJ N B S *,843X,*SURELEMENT*,12) /

C * LLLMENT*,93X,*TPUT VALUE*,4X,*TOTAL VALUE* / 1X)
                                                                                                                                         COMPCHE
                                                                                                                                                         117
290
                                                                                                                                         COMPCHE
                                                                                                                                                         119
                                                                                                                                         CCPFCMF
                                                                                                                                                         120
                                                                                                                                         CCFFCFF
                                                                                                                                                         122
                              00 11 J=1,NM65
WRITE (6,1112) J,(SUBELS(K,J),K=1,0)
                                                                                                                                         CUPFCHP
                                                                                                                                                         123
295
                         11 CONTINUE
                                                                                                                                         COPFCHE
                                                                                                                                                         1 25
                      1112 FORMAT (2x.13.3x.8(3x.F1u.5,2x))
                                                                                                                                         CCFFCMF
                                                                                                                                                         126
                    C THE FIRST HALF OF "HOM" ARRAY NOW CONTAINS AGGREGATE COMFONENT COSTS
C TIPE-PHASE AFPHOPHIATE HOS ELEPENTS, SUB-ELEMENTS AND TPLTS HEFE.
                                                                                                                                         CCFFCFF
                                                                                                                                                         126
3 .2
                                                                                                                                         COPFCMF
                                                                                                                                                         129
                                                                                                                                          CUPFCHF
                                                                                                                                         COPFCPF
                                                                                                                                                         1 31
                         33 CONTINUE
                                                                                                                                                         132
                    CCC
                                               PROCUCE THE UNIT COSTS PER EQUIPMENT
3 , 6
                                                                                                                                         COPFCMF
                                                                                                                                                         134
                                                                                                                                         CGPFCPF
CCPFCMF
CGPFCNF
                              Q1 = QCUAN
IPHL = IFH(NFH)
NNBSH1 = NMBS - 1
                                                                                                                                                          1 36
                                                                                                                                                         1 27
                              00 20 1=1,4M85M1

IF (APP-EQ.2) GO TO 15

IF (I.LT.IFHL) GO TO 15

IF(Q1.EQ.0.) GO TO 12

FOM(ILE Q.0.) GO TO 12
                                                                                                                                         COFFCHE
                                                                                                                                                         138
310
                                                                                                                                         CCFFCMF
                                                                                                                                                         129
                                                                                                                                                         140
                                                                                                                                         CGPFCMF
CGPFCMF
                                                                                                                                                         142
                                                                                                                                         COFFCHE
315
                              GO TO 20
                                                                                                                                         COFFCHE
                         12 CONTINUE FOR (I) = 0.
                                                                                                                                         COFFCHE
                                                                                                                                                         145
                              GO TO 28
                                                                                                                                                         146
                                                                                                                                         COMPLHP
                         15 CONTINUE
                              IF (Q2.(E.G.) GO TO 17
ROW(I) = POW(I)/Q2
                                                                                                                                                         148
326
                                                                                                                                         CCFPCHP
                                                                                                                                                         149
                                                                                                                                         CCFFCHF
                              GO TO 26
                         17 CONTINUE
                                                                                                                                         CUPPCMP
                                                                                                                                         CGMFCMF
                              POH ( I ) = 1.
                                                                                                                                                         152
                                                                                                                                         CCFFCHF
3.25
                         21 CONTINUE
                                                                                                                                                         154
                                                                                                                                         CCFFCHP
                                                                                                                                         CUPFLMP
                    C+
                              TOTAL UNIT COST FOR THE COMPONENT
                                                                                                                                         CCFFCHF
                    C.
                                   WFITE UNIT COST TOTALS BACK TO MASS STORAGE IN THE SAME POSITIONS WHENCE CAME THE "TPUT" VALUES
                                                                                                                                         CUMPCHE
                                                                                                                                                         117
                                                                                                                                                         1 58
336
                                                                                                                                         CCPFCMF
CCPFCMF
CGPFCPF
                    C
                              CALL WHITPS ( 1, ROW, NWBS, NORMS )
                                                                                                                                                         160
                              RETURN
                                                                                                                                                         1 (1
                                                                                                                                         COFFCFF
                              END
```

```
14/74
                                                                                                    FTN 4.6+433
                                                                                                                                  07/31/79 23.53.41
                                                 0-1=2
                            SUBROUTINE CERCHP (19. ROH. CQUAN. Q2)
 1
                                                                                                                                     CERCHE
                                                                                                                                                        3
                                   THIS RUUTINE DECODES THE PROFER CER EQUATION NUMBER, COMPUTES THE FOR ELEMENT USING THE PROFER PARAMETERS AND A XELF NUMBER IF NEEDED.
                                                                                                                                     CEACME
                                                                                                                                     CERCHE
                                                                                                                                     CERCMP
                                                                                                                                     CERCMP
                                    THIS KOUTINE WILL ALSO SUM THE CER'S WHEN THE PROPER
                                    CENTROL IS SET.
                                                                                                                                     CERCHE
                                                U NO SUMMATICH
1 INITIALIZE LGCATION FOR SUPMATION
                                    IADO =
                                                                                                                                     CERCMP
                                                                                                                                     CEFCPF
                                                                                                                                                       10
                                                  2 AGO NEW CEP EVALUATION TO WHATEVER IS IN THE ROW
                                                                                                                                     CENCYP
10
                                                                                                                                     CERCKE
                                                                                                                                                       12
                                                                                                                                     CERCMP
                                                                                                                                                       13
                                                                                                                                     SYST
                     SYST
15
                  С
                                                                                                                                     SYST
                                                     - NAME OF THE SYSTEM
                                                                                                                                     SIST
                             NMSYS
                  C
                                                    - 10TAL NUMBER OF SHIFCLASSES CONSIDERED
- NAME OF THE SHIPCLASS IN THE HORES
- INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
                              NOSLB
                                                                                                                                      SYST
                             NHSUB ( , )
                                                                                                                                     SYSI
                             NOCCHEL 1
                                                    (RUNNING TOTAL FOR ECUIPMENTS)
- NAMES OF EQUIPMENT (2 MCFCS) FOR TITLES
IN MBSOUT (INDEXED BY ECUIPMENT NUMBER
                                                                                                                                      SIST
                              NMCCMF( . . )
                                                                                                                                     SYST
                                                                                                                                                       10
                                                                                                                                     SYST
                                                                                                                                                       11
                                                        AND SHIPCLASS NUMBER!
                  00000
                                                     - NAMES OF EQUIPMENT(2 HORDS, 7 CHARS EACH)
FOR EQUIFMENT QUANTITIES TABLE - FLEET
                             NAMESCE . )
                                                                                                                                     1212
                                                                                                                                                       13
                                                                                                                                     TRYE
25
                                                                                                                                                       14
15
                                                        SUMMARY
                                                    - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIFCLASS (BEING PROCESSED)
                                                                                                                                                      16
17
                             FOUT
                                                                                                                                     SYST
                             SHIFNE
                                                                                                                                     SIST
                  CCC
3.0
                                                                                                                                     SYST
                                                                                                                                                      19
20
                                          NAMES / NMSYS, NOSLB, NMSUB(2,43), NGCOMP(43), NMCOMP(2,100,43), NAMESC(100,2), EQUI, SHIPNM
                            COMMON / NAMES
                                                                                                                                     SYST
                                                                                                                                      SYST
                                                                                                                                                       21
                            INTEGER EQUI,SHIPHM
                                                                                                                                                      22
                                                                                                                                     SYST
                                                                                                                                     SYSI
35
                                                                                                                                     SYST
                  CCC
                                                    - COUNT OF DIFFERENT AFFRCPRIATION CCDES - APPROPRIATION CODE NAMES
                             NAP
                                                                                                                                                       25
                                                                                                                                     SYST
                             APPROL )
                                                                                                                                     SYST
                                                                                                                                                       26
27
                                                    - APPROPRIATION CODE NAMES
- PERCENTAGES FOR CBS CLEMENT COST SFLITS
- COUNT OF THE LIFE CYCLE PHASES
- FIRST CBS ELEMENT NUMBER OF LACH PHASE
- CBS CLEMENT NUMBER FOR FAGE BREAKS
(LAST CBS NUMBER FOR THE PAGE)
- TITLES OF CBS PHASES
                              SPCL( , )
                  C
                             NPH
                                                                                                                                     SYST
                                                                                                                                                       â۵
                                                                                                                                                       29
                             IPH( )
                                                                                                                                     SYST
                              IPB( )
                  C
                                                                                                                                     515T
                                                                                                                                                       31
                             IPHASE( , )
                                                                                                                                     SYST
                                                                                                                                                       32
                             FLEETZ
                                                     - FLEET (SYSTEM) SIZE
                                                    - LONEST COST FLEMENT LEVEL TO BE FRINTED (LUMEST LEVEL TO BE HOLLED UP MITHIN PHASE)
                             NFOLL ( )
٠,5
                                                                                                                                     SIST
                                                                                                                                                       35
                                                                                                                                     TZYZ
                                                    - TOTAL ROTAL COST
- TOTAL INVESTMENT COST MINUS TOTAL RIFOUT
- TOTAL RIFOUT COST
                             ROTCT
                  C
                             TOTINV
                                                                                                                                                      37
                                                                                                                                     SYST
                                                                                                                                     SYST
                                                                                                                                                       38
                                                     - MISSILE FOT & COST - NUMBER OF CBS ELEMENTS TO BE INCLUDED IN FLYAMAY COSTS
50
                              SMISEL
                                                                                                                                                       39
                             NOFLY
                                                                                                                                     SIST
                                                                                                                                                       40
                                                                                                                                                       41
                                                                                                                                     SYST
                                                    - CBS ELEMENT NUMBER FOR FLYAMAY COSTS
- NUMBER OF YEARS IN SHIP INSTALLATION TABLE
- YEARS COVERED BY THE SHIP INSTALLATION TABLE
                             IFLYPCH( )
                              NOYES
                                                                                                                                     SYST
                                                                                                                                                      43
                              IYE AF S
                                                                                                                                     SYST
55
                                                                                                                                                       44
45
                                                       HUMBER OF YEARS IN SMIP INSTALLATION TABLE FLUS ONE (COLUMNS FOR PRINTING SHIF/INST TABLE)
                              IYKS
```

| SLE OUTINE | GE F CMP | 74.74 UP | T=2 | FTN ++6+433 | 7/31/79 | 23.53.41 |
|------------|-------------------|-------------|---------------------------------|----------------------------|------------|----------|
| | E FNOTE | S(,) | - FOCTNOTES FOR FIRST T | HO HAJOR GLIFUT CHAFTS | TZYZ | 47 |
| | 3 | | | | SYST | 46 |
| fü | COMMEN | / HISC / | NAP, APPRO (7) . SFCL (3, 6, 2) |), NP+, IPH(4), IFE(3), | SYST | 49 |
| | 1 | IPHA SE (| 2,4),FLEETZ,NRCLL(4),RD | TOT, TOTINV.TOTRIP. | SYST | 56 |
| | 2 | SMISRO, | NOFLY, IFLY FOH (25), NOYKS | ,IYEARS(12),IYRS, | SYSI | 51 |
| | 3 | FNOTE S (| 5,12) | | SYST | 52 |
| | INTEGE | * AFFRU, SF | CL.FLEFT7 | | SYST | 53 |
| 55 (| : | | | | SYST | 54 |
| | : | | | | PS2 | 2 |
| · · | | **** H2 (L | ENGTH AND COUNTER) CCMM | UN ++++++++++ | MS 2 | 3 |
| | 3 | | | | MS 2 | 4 |
| | 3 | | | | MS 2 | 5 |
| | C LENA | | - MASS STORAGE UNITS CO | MMCN RECORC LENGTH | MS 2 | 6 |
| | C | | (TYPICALLY 150) | | rsa | 7 |
| | : NAR2 | | - NUMBER OF ELEMENTS IN | | MS2 | 8 |
| | C ICC 18 | ! | - NUMBER OF EGLIFFENTS | IN THE EQUIPMENT | MSZ | 9 |
| (| | | LLEMENTS TABLE | | KS S | 10 |
| 75 (| | | - (150 HORUS) RECORD LE | | PS2 | 11 |
| (| | | IN THE "CERVLS" COMMC | | M S Z | 12 |
| į. | | | - 1900 WORDS) FECORD LEI | | MSS | 13 |
| (| | | IN THE "CERVLS" COMMO | N | rSa | 14 |
| | | | THE WISE TOOTS 1.50 1.40 | • | MS 2 | 15 |
| 90 | | 1 / M25 / F | ENR, NWBS, ICCTR, L150, L19 | u | FS2 | 16 |
| 9 | | | | | MS2 | 17 |
| 9 | | | | | PS2 PS2 | 18 19 |
| (| | | | | | 2 |
| | | | | | CEFVLS | |
| |) ••••• nerv | | CTTMATTNC | (CER) VALUES) COMMON ***** | CERVLS | 3 |
| | | 12 10031 E | SITURITING METAILINGUILE | (CEK) ANEDEZI COURON | CERVLS | 5 |
| | | | N CONTAINS LOCATIONS FO | D STABACE OF THE CEE | CERVLS | 6 |
| | | | E ROW ID'S, THE CER EQU | | CERVES | 7 |
| | | | NUMBERS, THE INPUT PARA | | CERVES | 8 |
| - | | | RAGE ARRAY FOR EQUIPMEN | | CERVLS | š |
| | | | S FOR ALL EQLIPMENT INF | | CERVLS | 10 |
| | 3 200 17017 | | S TON HEE EGGET HENT ENT | ••• | CERVLS | 11 |
| | C GERCI | • | . NUMBER OF CER'S FOR T | HIS PARTICULAR EQUIFMENT | CERVLS | 12 |
| | C GENE. | | (1 HORO) | The transfer Education | CERVLS | 13 |
| | IFORC | : () | - (F OR C) ALPHABETIC C | HARACTER INCICATING | CEAVLS | 14 |
| | 3 | | | (150 WCR0S) | CERVLS | 15 |
| | . IROW | 1 £ | - CBS ELEMENT NUMBER TO | HEICH THIS CER APPLIES | CEFILS | 16 |
| | : | | (150 HORCS) | | CERVES | 17 |
| | 30AI C | | - CER CONTROL FLAGS (0 | THRU 6) FCR ABBITIVE | CERVLS | 18 |
| | | | CERS OR SUBELEMENTS. | O INDICATES NO ADDING. | CEFVLS | 19 |
| (| 3 | | 1 THEU 6 INDICATE ADD | UF SUBELEMENTS. | CERVLS | 20 |
| | : | | (156 NUR(S) | | CERVLS | £1 |
| | ICEAN | ii | - REFERENCE NUMBER FOR | CER EQUATIONS IN THE | CEHVLS | 22 |
| 105 | 3 | | 'CERCOMP' SUBROUTINE. | (150 NOKES) | CERVLS | 23 |
| | C IXREF | NG | | ED IN CROSS REFERENCING | CEFVLS | 24 |
| | C | | A PREVIOUSLY COPPUTED | | CERVLS | 25 |
| | 3 | | ONLY CER EQUATION NUM | | CERVLS | 26 |
| | 3 | | REFERENCING. Q INDI | CATES NO CROSS-REF. | CEFVLS | 27 |
| | 3 | | (150 HOKES) | | CERVLS | 28 |
| | C IXREF | 043 | - CER CONTROL FLAGS FOR | | CERVLS | 29 |
| | C | | CER SUB-ELEMENTS. (15) | | CERVLS | 30 |
| | C IFSTO | | - STORES 'FACTOR' PARAP | | CERVLS | 31 |
| (| C PESTO | RE | - STORES NUMBERICAL PAR | AMETERS. (91) HOKOS) | CEHVLS | 32 |

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L7/31/79 23.53.41
                                                                                                   FTN 4.6+433
    SLEW OUTTINE CERCMP
                                      14/74
                                                 0FT=2
                                                     - A SINGLY-SUBSCRIPTED ARRAY CONTAINING A
                                                                                                                                    CEAVLS
                              ICER( )
115
                    c
c
                                                        MAXIMUM OF 146 CATA TRIPLETS WHOSE MEMBERS
                                                                                                                                    CEAVLS
                                                                                                                                                    34
35
                                                                                                                                   CLEVES
                                                         ARLI
                    C
                                                     - LQUIPMENT NAME
                                                                                                                                    CERVLS
                                 ICEF(1,4,7,
                                                                                                                                    CERVLS
                                                                                                                                                    37
                    c
                                        ETC)
                                                       INDEX FOR MASS STORAGE UNIT 8. INDEX BEGINS AT 1 AND INCREMENTS BY 9 (1,10,19, ctc). THE FOLLOWING DATA RECORDS ARE
                                                                                                                                                     38
                    č
                                  ICE# (2,4,8
                                                                                                                                    CERVES
12L
                                                                                                                                    CENVLS
                                         ETC)
                                                                                                                                    CENVLS
                    C
                                                         INDEXEDI
                                                                                                                                    CERVLS
                                                                                                                                                     41
                                                                CERCT
IFORC
                                                                                     6
                                                                                           IXEE FHO
                                                                                                                                    CERVLS
                                                                                                                                    CERVLS
                                                                                           IXELFAD
                    c
125
                                                                   IROWID
                                                                                            IFSTC₹E
                                                                                                                                    CERVLS
                                                                                                                                                     45
                                                                  I AOO
I CERNC
                                                                                     9
                                                                                           FSST CKE
                                                                                                                                    CERVLS
                                                                                                                                    CERVLS
                                                                                                                                                     46
47
                    C
                                                        INDEX FOR MASS STORAGE UNIT 2 AND 3.
INDEX BEGINS AT 18 AND INCREMENTS BY 2
118.20.22.ETC) AND IS IDENTICAL TO THE
                                                                                                                                    CERVLS
                                 ICEF(3,6,9
                                                                                                                                                     48
                                                                                                                                    CERVLS
1 30
                                                                                                                                    CERVLS
                                                                                                                                                    49
                                                         THIRD MEMBER OF DATA TRIPLET STORED IN
                                                                                                                                    CERVLS
                                                        THE IREC ARRAY.
SUBELS IS A CROSS-PATCHED ARRAY WHICH IS
RELATED CNE-TO-CNE TO THE CBS.
II IS USED LOCALLY WITHIN 'COMPCMP' AND
'CERCOMP' FOR INTERIM STORAGE OF UP TO
                                                                                                                                    CERVES
                                                                                                                                                    52
53
                              SUBELS( . )
                    C
135
                                                                                                                                    CERVLS
                                                                                                                                                    54
55
                                                                                                                                   CERVLS
CLHVLS
                                                        SIX SUBELEMENTS, 1 THRUFUT, AND 1 TOTAL VALUE FOR EACH CBS ELEMENT. A FACTUR IS A PRECURSOR OF CNF CR MCRE
                                                                                                                                                    56
57
                                                                                                                                    CERVLS
                                                                                                                                    CERVES
                                                                                                                                    CERVLS
                              FACTOR( )
141
                                                        CERS.
                                                                                                                                    CEFVLS
                                                                                                                                                     59
                                                                                                                                    CERVLS
                    c
                                                                                                                                    CERVLS
                             COMMON /CERVLS/ CERCT, IFORC(150), IROMID(150), IADD(150), ICERNC(150), IXREFNO(150), IXREFAO(150), IFSTORE(6,150), PSSTORE(6,150), ICER(300),
                                                                                                                                    CERVLS
                                                                                                                                                     €2
                                                                                                                                    CERVLS
                                                                                                                                                     €3
145
                                                      SUBELS(8,150), FACTORS(150)
                                                                                                                                                     65
                                                                                                                                    CERVLS
                                                                                                                                    CEFVLS
                                                                                                                                                     66
                             INTEGER CERCT
                                                                                                                                    CENVLS
                                                                                                                                                     €7
                    C
C
C
                      CERVLS
                                                                                                                                                     é۵
15:
                                                                                                                                                     €9
                                                                                                                                    CERVLS
                                                                                                                                    CERCMP
                                                                                                                                                     17
                    C
                             DIMENSION ROW(1)
                                                                                                                                    CERCME
                                                                                                                                                     18
                                                                                                                                    CERCHP
                                                                                                                                                     19
                             DIMENSION F (6) ,P (6) INTEGEN QUAN, F
                                                                                                                                                    2 ú
                                                                                                                                    CEFCMF
1 ...
                                                                                                                                    CERCME
                             DATA ISFF / 1HF / . ISEE / 1HG /
                     OATA NCENCE / 3000 /
2222 FORMAT (4H-** /4H ** ,A10, * CERCT * *,15, * **,021,5%,16/4H ** )
CO = QQUAN = DEFLUYMENT QUANTITY
                                                                                                                                    CERCME
                                                                                                                                    CENCYP
CERCHF
                                                                                                                                                     23
                    C
                                                                                                                                                     24
                                                                                                                                                     25
                                                                                                                                    CERCME
1 6 6
                             Q1 = QCUAN
                                                                                                                                    CERCHE
                                                                                                                                                    26
27
                                                                                                                                    CERCMP
                    C DO-LOOP 10.0 IS MASTER DO-LOUP AND HAS 3 DISTINCT FUNCTIONS!
                                                                                                                                    CENCHP
                            - EARLY COLE (THROUGH 5) EVALUATES LOCAL VARIABLES FROM MS8 VALUES FOR CLR IGENTIFIERS AND PARAMETERS AND FACTORS:
                                                                                                                                    CERCMP
                                                                                                                                                     29
                                                                                                                                    CERCPF
                                                                                                                                                     30
1 65
                           - MIDGLE CODE (FROM COMPUTED GO TO THROUGH 990) SELECTS AND EVALUATES A "CER" ON "FACTOR"!
- FINAL CUDE (FROM 99) THROUGH 1600) FOSITS RESULTS IN "FACTORS" AND "SUBLIS" AFFAYS.
                                                                                                                                    CERCMP
                                                                                                                                                     32
                                                                                                                                    CERCKE
                                                                                                                                    CLHCKP
                                                                                                                                    CERCHP
                                                                                                                                    CERCHE
                                                                                                                                                     25
36
176
                             CALL HEAC
                                                                                                                                    CEACHP
```

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SUBFOUTING GEROMP
                                14/74 OPT=2
                                                                                     FTN 4.6+433
                                                                                                              47/31/79 23.53.41
                      HRITE (6,6) NAMESC(19,1), NAMESC(19,2), (N,N=1,6), (M,M=1,8) 

6 FORMAT (1H+,45%, EVALUATION OF CERS AND FACTORS FOR *, 

C A7,1%,A7 / *u NOW CER TEMF *,6(3%,*F*,12,3%),1%, 

C 81* SUBEL*,11),2%,*FACTOR*)
                                                                                                                 CERCME
                                                                                                                 CENCHE
                                                                                                                               38
                                                                                                                 CENCHE
                                                                                                                               29
175
                                                                                                                 CENCKE
                        00 100: I=1.G=FCT
IFRO = IFORC(I)
                                                                                                                 CENCEP
                                                                                                                               41
                                                                                                                CERCME
                        IROW = IROWID(I)
IRAO = IADD(I)
                                                                                                                 CERCMP
                                                                                                                 CEACHE
                                                                                                                               44
                         JCER = ICEFNC(I)
                                                                                                                 CEFCMP
198
                        IXRF = IXREFNU(I)
IXAD = IXREFAD(I)
                                                                                                                 CERCMA
                                                                                                                 CERCHP
                                                                                                                               47
                        00 5 J=1,6
                                                                                                                 CENCEF
                                                                                                                               48
                        F(J) = IFSTORE(J.I)
P(J) = PSSTORE(J.I)
IF (F(J).EQ.IE:FF) P(J) = FALTORS(IFIX(P(J)))
                                                                                                                 CEFCHP
                                                                                                                 CERCME
1 ~ 5
                                                                                                                               £ú
                                                                                                                 CERCMP
                                                                                                                               51
                      5 CONTINLE
                                                                                                                 CERCME
                                                                                                                 CENCHP
                C SELECT EQUATION AND EVALUATE "CER" OR "FACTOR"
                                                                                                                               63
                                                                                                                 CEFCMF
                                                                                                                 CLACKE
196
                        GO TO ( 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 260, 210, 220, 230, 240, 250, 260) JCER
                                                                                                                               56
57
                                                                                                                CERCHP
                                                                                                                 CERCME
                                                                                                                 CERCMP
                    10 TEMP = P(1) * Q2**P(2)
                                                                                                                 CERCHE
                                                                                                                               59
                        GO TC 598
                                                                                                                 CERCME
195
                                                                                                                               ٤u
                    20 TEMP = P(1) + 02++P(2) / P(3)++P(4)
                                                                                                                 CERCME
                                                                                                                               €1
€2
                        GO TO 99J
                                                                                                                 CERCHE
                    3J TEHP = P(1) * P(2)**P(3) / P(4)**P(5)
                                                                                                                 CERCME
                                                                                                                               €3
                    GO TO 593
40 TEMP = P(1) * ((Q2 + P(2))**P(3) - P(2)**F(3))
                                                                                                                 CEFCHF
2:0
                                                                                                                CERCHP
                                                                                                                               ٤5
                        GO TO 598
                                                                                                                 CERCMP
                                                                                                                               €6
                    58 TEMP = P(1) * ((Q2 + F(2)) **P(3) - P(2) **F(3)) / F(4) **P(5)
                                                                                                                 CERCMA
                        60 TO 590
                                                                                                                CERCHP
                                                                                                                               €8
                    60 TEMP = P(1) * ((P(2) + P(3))**F(4) - P(3)**P(4)) / P(5)**P(6)
                                                                                                                 CENCHE
                                                                                                                               69
                    GO TO 991
76 TEMP = P(1) + P(2) + Q2
                                                                                                                               70
71
72
                                                                                                                 CERCHE
205
                                                                                                                CERCME
                        GO TO 993
                                                                                                                CERCHP
                    80 CONTINUE
                                                                                                                CEACHE
                        IF (IXAD.EQ.0) IXAD = 8
TEMP = P(1) * SUBELS(IXAD, IXRF)
                                                                                                                               74
75
                                                                                                                CERCMP
216
                                                                                                                CENCHA
                    GO TO 511
90 TEMP = P(1) * F(2)**P(3) * Q2**P(5)
                                                                                                                CEFCMF
                                                                                                                               76
77
                                                                                                                CE+CMF
                        GO TO SSO
                                                                                                                CERCHE
                                                                                                                               78
                   100 TEMP = P(1) * P(2)**P(3) * P(4)**P(5)
                                                                                                                 CERCME
                   GO TO 99)
110 TEMP = P(1) * F(2)**P(3) * P(4) * P(5) * F(6)
                                                                                                                               £3
215
                                                                                                                CERCMP
                                                                                                                CLECHE
                   GO TO 593
120 TEMP = F(1) * P(2) * P(3) * P(4)
                                                                                                                CERCHP
                                                                                                                               ٤2
                                                                                                                CEACHE
                                                                                                                               ٤3
                        60 TO 993
                                                                                                                CEACMP
                                                                                                                               84
220
                   130 TEMP = F(1) + F(2) + F(3) / P(4)
                                                                                                                CERCMA
                                                                                                                               15
                        TEMP = F(1) * P(2) * P(3) * P(4) * P(5) * P(6)
                                                                                                                CERCHE
                                                                                                                               tb
                                                                                                                CERCME
                                                                                                                               ٤7
                                                                                                                CERCKE
                   157 TENP # P(1) * (P(2)+P(3)+P(4)+P(5)+P(6))
                                                                                                                CERCHP
                                                                                                                               69
50
225
                         GO TO 490
                                                                                                                CEFCMF
                   160 TEMP = P(1)*P(2) + P(3)*P(4) + P(5)*P(6)
                                                                                                                CERCPF
                                                                                                                               ٩1
                        GO TO 991
                                                                                                                CHECHE
                                                                                                                               55
                   173 TEMP = (F(1) + P(2)+P(3)) * Q2
                                                                                                                CERCME
                                                                                                                               43
```

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47/31/79 23.53.41
                                                                                  FTH 4.6+433
    SLEFULTINE CLRCHP
                               74/74 OPT=2
                  GO TO 991
160 TEMP = (F(1) + P(2)*P(3)) * P(4)
                                                                                                             CEACHE
                                                                                                                            54
55
                                                                                                              CERCMA
230
                        GO TO 594
                                                                                                              CEFCMP
                                                                                                                            96
97
                   191 TEMP = (P(1) + P(2)*P(3)) * P(4) * P(5) * P(6)
                                                                                                              CERCPE
                                                                                                              CERCME
                                                                                                                            58
                        GO TG 590
                        TEMP = (P(1) + P(2)+P(3)) + P(4) + P(5)++P(6)
                                                                                                              CEFCMF
                   GO TO 591
210 TEMP = P(1) + P(2) + P(3) ++ P(4) + P(5) ++ P(6)
2 35
                                                                                                              CERCHE
                                                                                                                           100
                                                                                                              CERCHE
                                                                                                              CEACHE
                   220 TEMP = P(1) / ( P(2) + P(3) + P(4) )
                                                                                                              CEFCME
                                                                                                                           143
                        GO TO 591
                   23) TEMP = P(1) + P(2) + P(3) + P(4) + F(5) + P(6)
                                                                                                              CERCME
                                                                                                                           1 C5
                   GO TO 99J
243 TEMP = P(1) * Q1 ** P(2)
                                                                                                              CERCYF
                                                                                                                           106
                                                                                                              CERCMP
                                                                                                                           107
                                                                                                              CERCHE
                                                                                                                           148
                   25) TEMP = P(1) * P(2) ** P(3) * Q1 ** P(4)

GO TO 590

260 TEMP = P(1) * P(2) * P(3) * Q1
                                                                                                              CERCHE
                                                                                                                           109
                                                                                                              CEFCPF
245
                                                                                                                           110
                                                                                                              CERCME
                  990 CONTINLE
C MYCCC = 1H0
                                                                                                              CENCER
                                                                                                                           112
                CC
                                                                                                              CENCMP
                                                                                                                           113
                        HRITE (6,951) MYCCC, IFRC, IRON, IRAO, JCEF, TEMP,
                                                                                                              CERCHE
                  C C (P(N), N=1,6), (SUEELS(H, IROH), H=1,8), FACTORS(IROH)
991 FORMAT (A1,A1, I3, I1, I2, 1x, F8, 3, 1x, 6(1x, 1p66, 2),
256
                                                                                                              CENCHE
                                                                                                                           115
                                                                                                              CERCHP
                                                                                                                           116
                                  1X, 0P, 8F7.1, 1X, F7.1)
                                                                                                              CERCME
                                                                                                                           117
                C POSIT RESULT "TEMP" IN "FACTORS" OF "SUBELS" ARRAY
                                                                                                              CERCME
                                                                                                                           118
                                                                                                              CERCME
                                                                                                                           119
                                                                                                              CEFCFF
                                                                                                                           1 ĉŭ
                        IF (IFRC.EQ.ISEL) GO TO 992
IF (IFRC.NE.IEFF) STOP 02
FACTCRS(IROW) = TEMP
                                                                                                             CERCHP
                                                                                                                           121
                                                                                                              CERCME
                                                                                                                           122
                                                                                                             CLACHP
                  GO TC 599
992 IF(IFAD.EQ.U) GO TO 998
SUBELS(IFAD.IKCH) = TEMP
                                                                                                             CERCME
                                                                                                                           124
                                                                                                             CERCHP
                                                                                                                           125
25 u
                                                                                                              CERCPF
                   998 SUBELS (8, IROH) = SUBELS (8, IROW) + TEMP
                                                                                                             CERCMP
                                                                                                                           127
                   999 CONTINUE
                                                                                                             CENCHE
                                                                                                                           128
                        MYCCC = 1H0
                                                                                                              CENCRE
                        WRITE (6,991) NYCCC, IFRC, IKOM, IKAO, JCE F, TEMP,
(P(N), H=1,6), (SUEELS (M, IROM), P=1,6), FACTORS (IROM)
                                                                                                                          130
265
                                                                                                             CERCHP
                                                                                                              CENCYP
                 1394 CONTINUE
                                                                                                             CERCHP
                                                                                                              CERCMP
                                                                                                                          123
124
                        00 1103 K=1.CERCT
                                                                                                             CERCHE
276
                        IF (IFCRC(K) . NE. ISEE) GO TO 1148
                                                                                                             CEFUMP
                                                                                                                          126
137
                        KK = IFGHID(K)
                                                                                                              CERCME
                        ROWIKK) = SUBELS (8,KK)
                                                                                                             CENCHE
                  1145 CONTINUE
                                                                                                             CENCHE
                        RETURN
                                                                                                             CEACHP
                                                                                                                          139
275
                        END
                                                                                                             CENCHE
                                                                                                                          140
```

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67/31,79 23.53.41
  SUBPOUTINE ROLLUP
                              74/1-
                                        0P1 = 2
                                                                                  FTH + . 0 + 433
                       SUBROUTINE ROLLUP (KOH)
                                                                                                             KCLLUP
 1
                                                                                                             ROLLUP
               C
                             THIS ROUTING EXECUTES THE MOLE-UP PROCICURE FOR AUTOMATICALLY SUMMING THE RUM ENTRIES. THIS ROUTING IS CALLED EACH TIME THE ROM ELEMENTS ARE ALTERED.
                                                                                                             # (LLLP
                                                                                                             ROLLUP
                                                                                                             RCLLUP
                                                                                                             RCLLUP
                                                                                                             MS2
                  MSZ
1 L
               C
                                                                                                             PS2
                                           - HASS STORAGE UNITS COMMON RECORD LENGTH
                        LENK
                                           (TYPICALLY 150)

- NUMBER OF ELEMENTS IN THE COS (MAX 150)

- NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                                                                                                                            7
                                                                                                             MS2
               С
                        NHBS
                                                                                                             MSZ
                                                                                                                            ٥
                        ICCIF
                                                                                                             MSZ
15
                                              ELEMENTS TABLE
                                                                                                             PS2
                                                                                                                            10
                                           - (150 HURDS) RECORD LENGTH OF 7 ARRAYS
IN THE "CERVLS" COMMON
- (930 HORCS) RECORD LENGTH OF 2 PRRAYS
IN THE "CERVLS" COMMON
               C
                        L150
                                                                                                             MS 2
                                                                                                                            11
                                                                                                             F$2
               C
                        L300
                                                                                                             M$2
                                                                                                                            13
                                                                                                                           14
15
               C
                                                                                                             MSZ
                                                                                                             PS2
20
                       COMMON / MS2 / LENE, NHBS, I COTR, L150, L190
                                                                                                             MS2
                                                                                                                            16
               C
                                                                                                                            17
                                                                                                             MS2
                                                                                                             PS2
               С
                                                                                                             MSZ
                          ARRAY DEFINING THE ROLL-UP INPUT NUMBERS, TOTAL COUNT OF COST ELEMENTS WITH SPECIFIC ROLL-UF NUMBERS TO BE CUTPUT,
               C
25
                                                                                                             HOLUFOT
                                                                                                                            3
                                                                                                             RCLUPCT
                           ARRAY OF SELECTED HBS ELEMENTS NUMBERS, SELECTED ROLL-UP
                                                                                                             HCLLPCT
                          OUTFUT FLAG
               C
                                                                                                             ROLUPCT
                       COMMON / ROLUPCT / IROLL(150), ROLLTOT, ROLLSL(150), ROLLFLG INTEGER ROLLIOT, ROLLSL, ROLLFLG
                                                                                                             RCLLFCT
30
                                                                                                             FOL LPCT
               C
                                                                                                             RCLLFCT
ROLLPCT
                  C
                                                                                                             RCLLFCT
                       DIMENSION TOT (10)
                                                                                                             RCLLUP
                                                                                                                            10
3,5
                       DIMENSICH F.OH(1)
                                                                                                             FCLLUP
               C
                                                                                                             HCLLUF
                                                                                                                            12
               C
                                                                                                             RCLLUF
                                                                                                                            13
               C
                                    INITIALIZE THE SUMMATION ARRAY (TEMPORARY STOKAGE)
                                                                                                             RCLLLF
                             TC ZERO
                                                                                                             RCLLUF
                                                                                                                            15
                      00 16 I=1,10
TOT(I) = 0.0
٩C
                                                                                                             ROLLUP
                                                                                                                           16
17
                                                                                                             FCLLUP
                   10 CONTINUE
                                                                                                             ROLLUP
               c
                                                                                                             RCLLUF
                                                                                                                           19
                                    SUBTRACT OUT THE LOCATION OF THE FINAL TOTAL
                                                                                                             KCLLUP
                                                                                                                           20
                             (IF THE TOTAL LOCATION IS MOVED FROM THE NUBS LCCATION TO ANY OTHER LOCATION, THIS LCGIC WILL HAVE TO ALTERECY
               C
44,
                                                                                                             KCLLUP
               c
                                                                                                             ROLLUP
                                                                                                                           22
23
                       N1 = N#85 - 1
                                                                                                             RCLLUF
               ¢
                                                                                                             RCLLUF
                   20 CONTINUE
                                                                                                             FCLLUP
                                                                                                                           25
                                                                                                             RCLLUP
                                                                                                                           26
                                   SAVE THE INFUT ROLL NUMBERS AND ADD TO RUNNING SUM
                                                                                                                           27
                                                                                                             ROLLUP
                       IR = IFGLL(N1)
TOT(IR) = TOT(IR) + ROW(N1)
                                                                                                             # (LLUP
                                                                                                             ROLLUP
                                                                                                                           29
               C
                                                                                                                           30
                                                                                                             RCLLUP
55
                   38 CONTINUE
                                                                                                             ROLLUP
                                                                                                                           31
                                                                                                             PCLLUP
                                   DECREMENT NI. TEST FOR COMPLETION AND TEST TO SEE IF
```

| SI | UEFOUTINE ROLLU | P 74/74 | 2=140 | FTN 4.E+433 | U7/31/79 | 23.53.41 |
|-----|-----------------|----------------|-----------------------|----------------------------------|-----------|----------|
| | С | THERE IS | A KOLL VALUE PRESENT | r | ÄCLLUP | 34 |
| | | N1 = N1 - 1 | | | RCLLUP | 35 |
| ьį | | IF (N1 . EQ. | ı) GC TO Si | | RCLLUP | 36 |
| | | IF (IFOLL(N1 | . EQ.)) GO TO 30 | | RCLLUP | 37 |
| | С | | | | ROLLUP | 38 |
| | r | TES | T KULL VALUES TO GET | TO NEXT STEF - | RCLLUP | 39 |
| | С | IF FALVI | DUS IS EQUAL TO PRESI | ENT OR PREVIOUS LESS THAN PRESEN | NT ACLLUP | 40 |
| 65 | C | SLM IT | | | KCLLUP | 41 |
| | | IF I InCLLINA | +1) - IROLL(N1)) 28 | . 24. 43 | ACLLLP | 42 |
| | С | | _ | , | FCLLUP | 4.3 |
| | С | | | | RCLLUP | 44 |
| | C | LF I | PREVIOUS IS GREATER 1 | THAN PRESENT - | A (LLUP | 45 |
| 7.5 | С | PLACE SU | MATION IN PRESENT A | NO IF THE ROLL NUMBER IS NOT | KCLLUF | 46 |
| | C | | | LUCATION BACK TO ZERO | RCLLUP | 47 |
| | 40 | CONTINUE | | | HCLLUP | 48 |
| | С | | | | RCLLUP | 49 |
| | | ROW(N1) = ROH | (N1) + TOT(IR) | | KCLLUP | 50 |
| 75 | | IF (IR .EQ | L J GO TO 23 | | FOLLUP | 51 |
| | | TOT (IR) = 0.J | | | RCLLUP | 52 |
| | (| GO TO 20 | | | RCLLUP | 53 |
| | C | | | | RILLUF | 54 |
| | С | FIN | AL TOTAL SUMMATION I | N WBS CALLED TOTAL | RCLLUP | 55 |
| ÷ (| 50 | CONTINUE | | | RCLLUP | 56 |
| | 1 | ROW(NWES) = TO | T(1) | | ROLLUP | 57 |
| | C | | | | KCLLUP | 58 |
| | 1 | RETURN | | | RCLLUP | 59 |
| | 1 | ENO | | | RCLLUF | EU |

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74/74 CPT=2
                                                                                                     FTN 4.6+433
                                                                                                                                    08/13/79 20.07.11
                             SUBROUTING WASTOT
                                                                                                                                       HESTOT
                   C
                                                                                                                                       KBSTCT
                                                                                                                                                          3
                                            THIS ROUTINE COMPUTES THE HOS ELEMENT TOTAL COSTS
                                                                                                                                       WISTOT
                                    FOR FACH SHIP. THESE TOTALS ARE STORED ON MASS STORAGE UNIT 10. THIS ROUTINE IS ONLY CALLED WHEN THE WHS OUTPUT CHART PER SHIP IS NOT GENERATED. OTHERWISE THE UNIT 10 TOTALS ARE GENERATED WHEN THE WAS OUTPUT
 5
                                                                                                                                       WESTOR
                                                                                                                                       WESTOT
                                                                                                                                       #BSTCT
                                    CHART PER SHIP IS GENERATED IN THE HOSOUT ROUTINE.
                                                                                                                                       WRSTOT
                                                                                                                                       WESTOT
                                                                                                                                                         18
13
                   C
                      ******* CSTAB (EQUIPMENT QUANTITIES) COMMON ***********
                                                                                                                                       CSTAE
                                                                                                                                       CSTAR
                                                                                                                                                          3
                                                      - QUANTITY OF EQUIPMENT ALPEADY DEPLOYED
                              COMET
                                                                                                                                       CSTAR
                                                        (O & S ) OVER ALL SHIPCLASSES (Q1) (INTEGER)
QUANTITY OF EQUIPMENT TO BE MANUFACTURER
                                                                                                                                       CSTAR
                              QCMP T2
                                                                                                                                       CSTAB
                                                          INSTALLED (INVESTMENT) OVER ALL SHICLASSES
                                                                                                                                       CS 148
                   C
                                                         (Q2) (REAL)
                                                                                                                                       CSTAR
                                                      - SINGLY-CIMENSIONED ARRAY WHOSE MEMBERS ARE
                              CSTABLE
                                                                                                                                       CSTAP
                                                         A SERIES OF
                                                                                                                                       CSTAB
                                                                                                                                                        10
                                                                  -- SHIPCLASS NAME
                                                                                                                                       CSTAR
                                                                  -- C & S QUANTITY OF EQUIPMENT FOR EACH
                                                                                                                                                        12
20
                                                                                                                                      CSTAB
                                                                     SHIP ON A PARTICULAR SHIPCLASS
                                                                                                                                       CSTAB
                                                         SHIP UN A PARTICULAR SHIPCLASS
--INV QUANTITY OF EQUIPMENT FOR EACH
SHIP ON A PARTICULAR SHIPCLASS
(THESE THREE MEMBERS ARE GIVEN FOR EACH
SHIP CLASS MAKING A SERIES OF DATA TRIPLETS)
[VALUES ARE INTEGER]
                                                                                                                                       CSTAB
                                                                                                                                       CSTAB
                                                                                                                                                        15
                                                                                                                                       BATES
                                                                                                                                                        15
25
                   c
                                                                                                                                       CSTAR
                                                                                                                                       CSTAR
                                                                                                                                                        18
                                                        SINGLY-CIMENSIONED AFRAY OF THE INVESTMENT
QUANTITY OF EQUIPMENT FOR EACH SHIP ON A
PARTICULAR SHIPGLASS. QATA ELEMENTS MUST
BE STOPED IN THE SAME SHIPGLASS ORDER AS
CSTABLE. THE THO ARFAYS MAY BE THOUGHT
                              CSTABEL
                                                                                                                                       CSTAB
                                                                                                                                      CSTAB
                                                                                                                                       CSTAR
                                                                                                                                                        21
22
3.0
                                                                                                                                       CSTAB
                                                                                                                                       CSTAR
                                                                                                                                                        23
                                                         OF AS A SERIES OF DATA QUADRUPLETS.
                                                                                                                                       CSTAB
                                                                                                                                                        24
                                                                                                                                       CS TAB
                                                                                                                                      CSTAR
                                                                                                                                                        26
35
                             COMMON /CSTAB/GCMPT(100).GCMPT2(130).CSTABLE(3750).CSTABEL(1250)
                                                                                                                                       CSTAB
                                                                                                                                                        27
                            INTEGER OCMPT. CSTABLE
                                                                                                                                       CSTAB
                                                                                                                                       MARRAY
                                                                                                                                                          2
                     ********** MARRAY (IREC ARRAY) COMMON ****************
                                                                                                                                       PARRAY
                                                                                                                                       MARRAY
4 0
                                                                                                                                      MARRAY
                                                                                                                                                          5
                     THE IREC ARRAY IS A SINGLY-SUBSCRIPTED ARRAY WHOSE FIRST POSITION IS THE TOTAL NUMBER OF UNIQUE SHIPCLASS/EQUIPMENT COMBINATIONS. THE NEXT THREE POSITIONS START A SERIES OF TRIPLETS WHOSE
                                                                                                                                      MARRAY
                   C
                                                                                                                                      MARRAY
                                                                                                                                      MARRAY
                     MEMBERS ARE: SHIPCLASS NAME, EQUIPMENT NAME, MS 3 INDEX.

IREC(1) - THE RUNNING SUM OF THE TOTAL NUMBER OF UNIQUE SHIPCLASS/EQUIPMENT COMBINATION IN THE
                                                                                                                                       MARRAY
45
                                                                                                                                      MARRAY
                                                                                                                                       MARRAY
                                                     EQUIPMENT LEVEL INPUT - THE NAME OF THE SHIP CLASS
                              1920 (2,5,4,
                                                                                                                                      MARRAY
                                     11.ETC)
                                                                                                                                      MARRAY
5 0
                              IREC (3.6.9
                                                      - THE NAME OF THE EQUIPMENT
                                                                                                                                       MARRAY
                                     12.ETC)
                                                                                                                                      MASSAY
                              IPEC (4.7.10
                                                      - INDEX FOR MASS STORAGE UNIT 3.
                                                                                                          AN INTEGER
                                                                                                                                      MARRAY
                                                                                                                                                        17
                                                        NUMBER REGINNING A 18 AND INCREMENTING BY 2 TO FORM 18,20,22,24,ETC. THIS INDEX IS
                                                                                                                                      HARRAY
HARRAY
                                     13.ETC)
                                                                                                    THIS INDEX IS
                                                                                                                                                        19
                                                        THE STARTING LOCATION OF A RECORD (LENGTH)
"NHOS HORDS") ON MASS STORAGE 3 HHICH
CONTAINS THE UNIT COSTS OF THE EQUIPMENTS
55
                                                                                                                                       MARRAY
                                                                                                                                                        20
                                                                                                                                      MARRAY
                                                                                                                                      MARRAY
```

The state of the s

in the second

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7+/7 . OPT=2
                                                                                FTN 4.E+433
                                                                                                       38/13/79 23.07.11
   TOTERW BRITUGREUZ
                                                                                                          MAFRAY
                                             ON A UNIT SHIP (COMPUTED BY SUBROUTINE
               C
                                                                                                                       24
25
                                             COMPCMP).
                                                                                                          MARRAY
                                                                                                          MARRAY
               ŗ
                       COMMON / MARRAY / IREC(3756)
                                                                                                          MAFRAY
                                                                                                          MS 2
                  3
                                                                                                          MS2
                                                                                                          HS2
                                                                                                          MS 2
 U 5
                C
                        LENR
                                          - MASS STORAGE UNITS COMMON RECORD LENGTH
                                                                                                          MS 2
                                           TYPICALLY 1501

NUMBER OF ELEMENTS IN THE CBS (MAX 150)
NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                                                                                                          MS2
               0000
                                                                                                          MS Z
                        NWBS
                        ICCTR
                                                                                                          MS 2
                                             ELEMENTS TABLE
 70
                                           - (150 WORDS) RECORD LENGTH OF 7 ARRAYS
IN THE "CERVLS" COMMON
- (930 WORDS) RECORD LENGTH OF 2 ARRAYS
                        L150
                                                                                                          MS2
                                                                                                          MS 2
                        F330
                                             IN THE "CERVLS" COMMON
                                                                                                          HS 2
                                                                                                                       14
                                                                                                          HS2
                       COMMON / MS2 / LENR.NWBS.ICCTR.L150.L190
                                                                                                          MS 2
                                                                                                          HS 2
                                                                                                          MS2
                                                                                                                       18
19
                                                                                                          HS2
                                                                                                          KFUT
                                                                                                                        2
 80
                NPUT
                C VARIOUS OTHER ARRAYS ARE EQUIVALENCED TO THE "ARAY" ARRAY AS IN:
                                                                                                          RPUT
                                                                                                          NPUT
                   - SLCCM 1 ROW
                                        = ARAY(1,1)
 05
                   - BUDGET : CG = ARAY(1,2)
- INPUPO : IOREC = ARAY(1,1)
- CCMPCMP: ROW = ARAY(1,1)
                                                                                                          KPUT
                                                                                                          NPUT
                                                                                                          NPUT
                                                                                                                       10
                   - APCELM : IRAY = ARAY(1.1)
                                                                                                          NPUT
 90
                                                                                                          KFUT
                                           / ARAY(150.2)
                                                                                                          RPUT
                       COMMON / NPUT
                                                                                                          NPUT
                                                                                                          SYST
               č
                  CCC
                        NMSYS
                                           - NAME OF THE SYSTEM
                                                                                                          TZYZ
                                             TOTAL NUMBER OF SHIPCLASSES CONSIDERED
                        NOSUB
                        NOSUB - (ITAL NORTH OF STIFFCLASS IN THE NORTH OF THE SHIPCLASS IN THE MORUS
NCCOMP() - INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
(QUNNING TOTAL FOR EQUIPMENTS)
NHCCHF(,,) - NAMES OF EDUIPMENT (2 MOROS) FOR TITLES
                000
                                                                                                          SYST
                                                                                                          1242
123
                                             IN MESOUT (INDEXED BY EQUIPMENT NUMBER AND SHIPCLASS NUMBER)
                                                                                                          SYST
                                                                                                          SYST
                        NAMESCE . )
                                           - NAMES OF EQUIPMENT (2 HORDS, 7 CHARS EACH)
FOR EQUIPMENT QUANTITIES TABLE - FLEET
                CCC
                                                                                                                       14
165
                                                                                                          SYST
                                                                                                          SYST
                                             SUMMARY
                                           - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIPCLASS (BEING PROCESSED)
                        LOOL
                                                                                                          SYST
                        SHIPNM
                                                                                                                       17
                C
                                                                                                          SYST
                                                                                                                       19
110
                                                                                                          SYST
                                  NAMES / NMSYS. NOSUB. NMSUP(2,43), NOCOMP(43), NMCOMF(2,103,43), NAMESC(1,0,2), EQUI, SFIPNM
                       CCHHON / NAMES
                                                                                                          SYST
                                                                                                                       21
                       INTEGER EQUISHIPHM
                                                                                                          SYST
                                                                                                                       23
```

| | SUBROUTINE WBS1 | TOT 74/74 | CPT=2 | FT4 4.6+433 | 08/13/79 | 20.07.11 |
|-------|-----------------|-------------------|------------------------|---|----------|----------|
| 11 | 5 C | | | | SYST | 24 |
| | Č | NAP | - COUNT OF DIFF | ERENT APPROPRIATION CODES | SYST | 25 |
| | č | APPRO() | - APPROPRIATION | | SYST | 26 |
| | č | SPCL(.) | | OR COS ELEMENT COST SPLITS | SYST | 27 |
| | Ċ | NPH | | LIFE CYCLE PHASES | SYST | 2 5 |
| 12 | | IPH() | | HENT NUMBER OF EACH PHASE | SYST | 29 |
| | Č | IPB() | | UMBER FOR PAGE BREAKS | SYST | 30 |
| | Ċ | | | BER FOR THE PAGE) | SYST | 31 |
| | Č | IPHASE(.) | - TITLES OF COS | | SYST | 32 |
| | Ċ | FLEE TZ | - FLEET ISYSTEM | | SYST | 33 |
| 12 | 5 C | NROLL() | - LOWEST COST E | LEMENT LEVEL TO BE PRINTED | SYST | 34 |
| - | Ċ | | | TO BE ROLLED UP HITHIN PHASE) | 5 Y S T | 35 |
| | Ċ | ROTOT | - TOTAL POTSE C | | SYST | 36 |
| | C | TOTINV | | ENT COST MINUS TOTAL RIPOUT | SYST | 37 |
| | Ċ | TOTRIP | - TOTAL RIPOUT | COST | SYST | 3 8 |
| 13 | ı C | SMISPO | - MISSILE POTLE | COST | SYST | 39 |
| | Ċ | NOFLY | - NUMBER OF CAS | ELEMENTS TO BE INCLUDED IN | TRYE | 43 |
| | č | | FLYAWAY COSTS | | SYST | 41 |
| | Č | IFLYROW() | - CBS ELEMENT N | UMBER FOR FLYAWAY COSTS | TZYZ | 42 |
| | č | NOTES | | RS IN SHIP INSTALLATION TABLE | SYST | 43 |
| 139 | _ | IYEARS | | BY THE SHIP INSTALLATION TABLE | SYST | 44 |
| | Č | IYRS | | RS IN SHIP INSTALLATION TABLE | SYST | 45 |
| | č | •••• | | UMNS FOR PRINTING SHIP/INST TABLE! | | 46 |
| | č | FNOTES(.) | | FIRST THE HAJOR OUTPUT CHARTS | 5 Y S T | 47 |
| | č | | | TIST THE THEORY SETTED STRAIG | SYST | 48 |
| 14 | • | COMMON / MISC | / NAP. 49990 (7) . SP | CL (3,6,2),NPH, IPH(4), IPB(3), | SYST | 49 |
| | • | | | LL (4), RETOT, TOT INV. TOTRIP. | SYST | 5 0 |
| | | | | 5) NOTRS, IYEARS (12) . IYRS. | SYST | 51 |
| | | | S (5 • 12) | >/ (NO NO) 1 C NO 1 E V 1 NO | SYST | 52 |
| | | INTEGER APPRO | | | SYST | 53 |
| 145 | 5 C | 211120211 211 101 | 3. 521. 622.2 | | SYST | 54 |
| • • | Č | | | | WESTOT | 16 |
| | • | DIMENSION TOTAL | 1501 | | HESTOT | 17 |
| | C | 01.2.13131 | 1507 | | WBSTOT | 18 |
| | č | 2412 | TING INDEX FOR ST | ORAGE OF THE SHIP SUMMARIES | WESTOT | 19 |
| 150 | _ | TOTALS ON | | ORAGE OF THE SHIP SUMMARIES | WESTOT | 28 |
| 100 | , , | DATA INDX TOT | | | WBSTOT | 21 |
| | С | UMIN INDATON | 1271 / | | 10128W | 22 |
| | • | IPH2 = IPH(2 | • | | WESTOT | 23 |
| | | IPHL = IPH(N | | | WESTCT | 24 |
| 15 | E | NWBSM1 = NWBS | | | WESTOT | 25 |
| • • • | | 00 150 ISUSS=1 | | | TOTER | 26 |
| | С | 00 230 230 30-1 | 1110300 | | WESTOT | 27 |
| | č | nees | THE THREYES FOR BT | CKING THE PROPER COMPONENTS | WESTOT | 28 |
| | č | FOR THIS | | OKING THE PROPER GOINGHENTS | HOSTOT | 29 |
| 161 | _ | IBEG = ICCMP() | • | | MESTOT | 30 |
| | • | | (NOCOMP(ISUES) - | 11 • 7 | HESTOT | 31 |
| | | J86G = (184G-1 | | 1, · J | HPSTOT | 32 |
| | С | 3000 - 113 0 1 | •••• | | HUSTOT | 33 |
| | č | TMTT | TALIZE SUMMATION | LOCATIONS | HBSTOT | 34 |
| 16 | | 00 14 J=1.NW85 | | F00411043 | WESTOT | 35 |
| 20 | • | TOT(J) = 0.0 | • | | MRSTCT | 36 |
| | 4.6 | CONTINUE | | | WASTOT | 37 |
| | c ' | , 00111 21101 | | | WESTOT | 36 |
| | č | neue | LOP THE COMPONENT | TOTALS FOR THIS SHIP | WESTOT | 39 |
| 17 | | | 23. 1112 00117 0112111 | TOTAL FOR THE SHEET | TOTZBW | 40 |
| | | FINAL TOTAL IN | WAS LINEL TO GOTT | EN BY SUMMING THE PHASE BREAK LINE | | 41 |
| | | | | | | |

| SUBROUTINE WBST | OT 74/74 CPT=2 | FTN 4.6+433 | 16/12/79 | 20.07.11 |
|-----------------|---------------------------------------|--------------------|----------|----------|
| c | | | HOSTOT | 42 |
| | 00 1u0 I=1.NWBSM1 | | TOTZEM | 43 |
| | 18:Gx = 18:G | | WESTOT | 44 |
| 175 | JBFGX = JBFG | | WRSTCT | 45 |
| | IF (I.LT.IPHL) GO TO 60 | | WASTCT | 46 |
| | IF (NPH. E0.2) GO TO 60 | | TOTERW | 47 |
| C | | | WESTCT | 48 |
| | DC 50 J=184G,IEND,3 | | HBSTOT | 49 |
| 185 | CALL REAUMS (3. AFAY(1.2), LENR. IR | EC(J)) | KRSTOT | 50 |
| | TCT(I) = TOT(I) + ARAY(I.2) * FLOAT(| CSTARLE (IBEGX-1)) | WBSTOT | 5 1 |
| | IBEGX = IBEGX + 3 | | HESTOT | 5 2 |
| 50 | CONTINUE | | WASTOL | 53 |
| | GC TO 103 | | WBSTOT | 54 |
| 185 60 | CONTINUE | | 10126# | 5 5 |
| | 00 70 J=185G.IENU.3 | | WBSTOT | 5 6 |
| | GALL READMS (3, ARAY (1.2), LENR, IN | EC (J)) | WRSTCT | 57 |
| | TOT(1) = TOT(1) + ARAY(1.2) * CSTAGE | L(JBEGX) | WBSTCT | 5 6 |
| 73 | CONTINUE | | WRSTOT | 5 9 |
| 190 C | | | WESTCT | 6.0 |
| 160 | CONTINUE | | WBSTOT | 61 |
| | TOT(NWBS) = TOT(1) + TOT(1PH2) + TOT | (IPHL) | WBSTOT | 6 2 |
| C | | | WRSTOT | 63 |
| C | DEFINE INDEX FOR STORAGE | | TOTZBH | 64 |
| 195 | INDX = INDXTOT + ISUAS - 1 | | WASTCT | 65 |
| С | | | KASTOT | 66 |
| С | STORAGE OF TOTALS ON UNIT | 10 | WBSTOT | 67 |
| | CALL HRITMS (10. TOT. NWES. INOX) | | WESTOT | 6.9 |
| С | | | KBSTCT | 69 |
| | CONTINUE | | WBSTOT | 70 |
| С | | | WRSTOT | 71 |
| | RETURN | | WESTOT | 72 |
| | END | | WBSTOT | 73 |

```
37/31/79 23.53.41
     JUEROUTINE APCELM
                                                                14/74 OPT=2
                                                                                                                                                                            FFN 4.0+433
                                                SUBROUTINE APCELM
                                                                                                                                                                                                                                      APCFLE
   1
                                                                                                                                                                                                                                       AFCELM
                                                                           THIS ROUTINE DEFINES THE INDRO ARRAY USED IN THE
                                                                                                                                                                                                                                      APCELM
                                                              WESGUT FOUTINE -
INORC(1.1) - APPRO CCGE
                                                                                                                                                                                                                                       APCELM
                                                                                                                                                                                                                                       APC! LF
                                CCC
                                                                            INORC(I,2) - ELLMENT NUMBER
                                                                                                                                                                                                                                       AFCELM
                                                                            INORO(I,3) -
                                                                                                                                                                                                                                       APCELM
                                                                           INORDITAL - THESE 3 COST ELEMENT TITLE (CBS)
                                                                                                                                                                                                                                       APCELM
                                                             IMORD(I,5) - MHERE 'I' GOES FROM ONE TO NWBS
                                                                                                                                                                                                                                       AFCELM
                                                                                                                                                                                                                                                                     10
                                                                                                                                                                                                                                      APCELH
16
                                                                                                                                                                                                                                                                    11
                                                                                                                                                                                                                                       APCELM
                                               ARRAY CONTAINING APPRO CODE, COS NUMBER, COST ELEMENT IC COMMON / APELOUT / INORD(150.5)
                                                                                                                                                                                                                                      AFELCLT
                                                                                                                                                                                                                                      AFELCLT
                                Consessed and Control of the control
15
                                                                                                                                                                                                                                      NPL 1
                                                                                                                                                                                                                                      MPLI
                                                                                                                                                                                                                                                                      5
                                C VARIOUS CITER ARKAYS ARE EQUIVALENCED TO THE "ARAY" ARPAY AS IN:
                                                                                                                                                                                                                                      APUT
                                             SLCCH
                                                              I ROW
                                                                                     = ARAY (1.1)
                                C
                                                                                                                                                                                                                                      NPU 1
                                             BUDGET : CG
                                                                                      = ARAY(1,2)
                                                                                                                                                                                                                                      NPL 1
26
                                       - INPUPD : IOFEC = ARAY(1,1)
- COMPCHP: ROW = ARAY(1,1)
                                                                                                                                                                                                                                      NPU T
                                        - COMPCHPI ROW = ARAY(1,1)
- AFCELM | IRAY = ARAY(1,1)
                                                                                                                                                                                                                                      AFL I
                                                                                                                                                                                                                                                                     10
                                                                                                                                                                                                                                                                     11
                                                                                                                                                                                                                                      NPLT
                                               COMMON / NEUT
                                                                                            / ARAY(150,2)
25
                                                                                                                                                                                                                                      NPL T
                                                                                                                                                                                                                                                                    13
                                C
                                                                                                                                                                                                                                      KPUT
                                                                                                                                                                                                                                      MS &
                                     ******* MS (LENGTH AND COUNTER) C (HMON ***************
                                C
                                                                                                                                                                                                                                      PS2
                                                                                                                                                                                                                                                                      3
                                                                                                                                                                                                                                      MS2
                                0000000000
                                                                                          - MASS STORAGE UNITS COMMON RECORD LENGTH (TYPICALLY 150)
- NUMBER OF ELEMENTS IN THE CBS (MAX 150)
- NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                                                  LENF
                                                                                                                                                                                                                                      MS2
                                                                                                                                                                                                                                                                      6
7
                                                                                                                                                                                                                                      rsz
                                                  NWAS
                                                                                                                                                                                                                                      MS2
                                                  ICCTR
                                                                                                                                                                                                                                      MSE
35
                                                                                                 ELEMENTS TABLE
                                                                                                                                                                                                                                      MS 2
                                                                                                                                                                                                                                                                    10
                                                                                           - (150 MORCS) RECORD LENGTH OF 7 ARRAYS
IN THE "CERVLS" COMMON
                                                  L150
                                                                                                                                                                                                                                      PS2
                                                                                                                                                                                                                                                                    12
13
                                                                                                                                                                                                                                      MS2
                                                  L900
                                                                                            - 1910 HORES) RECORD LENGTH OF 2 ARRAYS
                                                                                                                                                                                                                                      MSZ
                                                                                                IN THE "CERVLS" COMMON
                                C
                                                                                                                                                                                                                                      MS 2
                                                                                                                                                                                                                                      MSZ
                                                                                                                                                                                                                                                                    15
                                                COMMON / MS2 / LENK, NHBS, ICCTR, L150, L190
                                                                                                                                                                                                                                      MS 2
                                                                                                                                                                                                                                                                    16
                                C
                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                     MS2
MS2
                                                                                                                                                                                                                                                                    18
19
                                CCC
45
                                                                                                                                                                                                                                      APCELM
                                                DIMENSION IRAY (1)
                                                                                                                                                                                                                                      AFCELM
                                                                                                                                                                                                                                                                    17
                                C
                                                                                                                                                                                                                                      APCELH
                                                INTEGER BLANK
                                                                                                                                                                                                                                      APCELM
                                C
                                                                                                                                                                                                                                      AFCFLH
                                                                                                                                                                                                                                                                    20
                                                EQUIVALENCE ( ARAY, IRAY)
                                                                                                                                                                                                                                      AFCELH
                                C
                                                                                                                                                                                                                                      APCLLM
                                                                                                                                                                                                                                                                    22
                                                DATA BLANK / 10H
                                                                                                                                                                                                                                      AFCELM
                                                                                                                                                                                                                                                                    23
24
                                C
                                                                                                                                                                                                                                      APCELH
                                                                           SETUP HBS COUNTER
                                                                                                                                                                                                                                      AFCELP
                                                                                                                                                                                                                                                                    25
                                                1 = 0
                                                                                                                                                                                                                                      APCELH
                                                                                                                                                                                                                                                                    26
27
                                C
                                                                          LOOP FOR 5 FILES OF CATA ON INIT 3
                                                                                                                                                                                                                                      AFCELM
```

| SLL | OUTINE AP | CFLM 74/74 OFT=2 | FTN6+433 | 47/21/79 | 23.53.41 |
|-----|-----------|---|----------|----------|----------|
| | | 00 40 F=1.5 | | AFCELM | 29 |
| | | CALL RIADHS (3. ARAY. LENF. H) | | APCELM | 33 |
| é! | c | | | AFCELM | 31 |
| | Ľ C | UEFINE ALL ELEMENTS ON INDEX M | | APCELM | 32 |
| | | 00 30 J=1.30 | | AFCELM | 13 |
| | | I = I + i | | APCELM | 34 |
| | c | | | APCELM | 35 |
| 65 | c c | TEST FOR NHBS ELEMENTS | | APCELM | ?6 |
| | | IF (I .GT. NW85) GO TO 50 | | AFCELM | 37 |
| | | $INORG(I_{+}1) = IRAY(J*5-4)$ | | APCELM | 38 |
| | | IF (INORD(I,1) .EQ. 0) INORD(I,1) = BLANK | | APCELM | 39 |
| | С | | | APCELM | 43 |
| 76 | | IMORD(1,2) * I | | AFCELM | 41 |
| | C | | | APCELM | 42 |
| | | INORD(1,3) = IRAY(J*5-3) | | APCELM | 43 |
| | | IMORC(I,4) = 1AAY(J*5-2) | | APCELM | 44 |
| | | IMORD(1,5) = IRAY(J*5-1) | | APCELM | 45 |
| 75 | | DO 24 N=3.5 | | AFCELM | 46 |
| | | IF (INCAD(I,N) .EQ. 8) INORG(I,N) = BLANK | | APCELM | 47 |
| | | 20 CONTINUE | | AFCELM | 48 |
| | C | | | APCELM | 49 |
| | | 30 CONTINLE | | APCELM | 54 |
| ن 9 | С | | | APCELM | 51 |
| | | 40 CONTINUE | | MPCELM | 52 |
| | ε | | | AFCELM | 53 |
| | | 50 CONTINUE | | APCELM | 54 |
| | С | | | APCELM | 55 |
| 65 | | RETUFN | | APCELM | 56 |
| | | END | | APCELM | 57 |

```
74/74 OFT=2
                                                                                                            FTN 4.6+433
                                                                                                                                              47/31/79 23.53.41
                                                                                                                                                 FCLCKT
                              SUBROUTINE ROLONT
 1
                                                                                                                                                 KOLLKT
                    CCC
                                      THIS FUUTINE HILL BE CALLED HHEN CHFTONT (5) CPTION IS SET TO 1. THIS MOUTINE HILL COUNT UF THE NUMBER OF COST ELEMENTS TO BE QUPUT ON THE COMPONENT CHAFTS AND THE SHIP SUPARY CHAFTS. THE COST ELEMENTS ARE SELECTED BY HAVING A ROLL-UP NUMBER EQUAL TO ON LESS THAN THE VALUES INPUT IN ELOCK CATA. THE INPUT VALUES ARE IN ARRAY NACLL AND THERE IS A SEPARATE VALUE FOR EACH PHASE ANOVOR PAGE BREAK IF FULL PRINTOUT HERE REQUESTED.
                                                                                                                                                 ROLCAT
                                                                                                                                                 ACLCAT
                                                                                                                                                 HGLCHT
                    CCC
                                                                                                                                                 RCLCNT
                                                                                                                                                 ROLCHT
                    CCC
                                                                                                                                                HOLCHT
                                                                                                                                                 RCLCNT
                                                                                                                                                                    10
10
                                                                                                                                                 ROLCAT
                                                                                                                                                                    11
                                                                                                                                                 ROLCHT
                                                                                                                                                 MS 2
                    Č
                       ******** MS (LENGTH AND COUNTER) C (MMON ********************
                                                                                                                                                 MEZ
                   Ç
15
                                                                                                                                                 MS 2
                                LENR
                                                         - MASS STORAGE UNITS COMMON RECORD LENGTH
                                                                                                                                                 MS 2
                                                         (TYPICALLY 150)
- NUMBER OF ELEMENTS IN THE CBS (FAX 150)
- NUMBER OF EQUIPMENTS IN THE EQUIPMENT
                                                                                                                                                 MS 2
                                NHAS
                   CCC
                                                                                                                                                 M52
                                                                                                                                                 KS 2
                                ICCTR
26
                                                             ELEMENTS TABLE
                                                                                                                                                 PS2
                                                                                                                                                                    10
                                                         - (150 NORDS) RECORD LENGTH OF 7 ARRAYS IN THE "CERVLS" COMMON
                    C
                                1150
                                                                                                                                                 452
                                                                                                                                                                    11
                                                                                                                                                 rs2
                                                                                                                                                                    12
                                L900
                                                             (900 HORCS) RECORD LENGTH OF 2 ARRAYS IN THE "CERVLS" COMMON
                                                                                                                                                                   14
15
                   C
                                                                                                                                                 MS2
35
                                                                                                                                                 rs a
                              COMMON / MSZ / LENR, NHBS, I CCTR, L158, L198
                                                                                                                                                 HS2
                   С
                                                                                                                                                 MS2
                                                                                                                                                                    17
                                                                                                                                                 MSZ
                                                                                                                                                                    18
                    CCC
                                   ARPAY DEFINING THE ROLL-UF INPUT NUMBERS. TOTAL COUNT OF COST ELEMENTS WITH SPECIFIC ROLL-UP NUMBERS TO BE CUTPUT.
                                                                                                                                                 RCLLECT
34.
                                                                                                                                                 RCLLPCT
                   C
                                                  SELECTED WAS ELEMENTS NUMBERS, SELECTED ROLL-UP
                                                                                                                                                 RCLLFGT
                                   OUTFUT FLAG
                                                                                                                                                 RCLUPCT
                              COMMON / ROLUPCT /
                                                                IROLL(15J), ROLLTOT, FOLLSL(15J), ROLLFLG
                                                                                                                                                 RCL LPCT
                              INTEGER ROLLTOT, RULLSL, ROLLFLG
7.5
                                                                                                                                                 KOLLPCT
                                ************* BUDG C(MMQN **********************
                                                                                                                                                 RCLLFCT
                                                                                                                                                 HOL LPCT
                                                                                                                                                SYST
                       SIST
                                                        - NAME OF THE SYSTEM
- TOTAL NUMBER OF SHIPCLASSES CONSIDERED
- NAME OF THE SHIPCLASS IN THE HORES
- INDEX NUMBER FOR EQUIPMENTS (COPPONENTS)
(RUNNING TOTAL FOR EQUIPMENTS)
- NAMES OF EQUIPMENT (2 HORDS) FOR TITLES
IN HOSOUT (INDEXED BY ECUIPMENT NUMBER
AND SHIPCLASS NUMBER)
- NAMES OF EQUIPMENTS HORDS, 7 CHARS GACHI
                                NMSYS
                                                                                                                                                 SYST
                   C
                                NOSUB
                                                                                                                                                 SYST
                                                                                                                                                                     6
7
                                MMSUB( , )
45
                                NOCCHF( )
                                                                                                                                                SYST
                                                                                                                                                 SYST
                                NMGCMF( , , )
                   000000
                                                                                                                                                5751
5757
                                                                                                                                                                   11
                                                         - NAMES OF EQUIPMENT (2 WONDS, 7 CHARS EACH)
FOR EQUIPMENT QUANTITIES TABLE - FLEET
50
                               NAMESCI , )
                                                                                                                                                 SYST
                                                                                                                                                                   14
                                                                                                                                                 SYST
                                                             SUMMARY
                                                                                                                                                 SYST
                                                         - PRESENT EQUIPMENT (BEING PROCESSED)
- PRESENT SHIPCLASS (BEING PROCESSED)
                   0000
                               EQUI
                                                                                                                                                 SIST
                                                                                                                                                                    16
                                SHIFNE
                                                                                                                                                SYST
                                                                                                                                                                   17
                                                                                                                                                                   18
                              COMMEN / NAMES / NMSYS, NOSEB, NMSUB(2.43), NOCOMP(43).
                                                                                                                                                SYST
```

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FTH 4.6+435
                                                                                                                                     u7/31/79 23.53.41
    SURFAUTINE ROLENT
                                       74/74 OFT=2
                                            NMCOMP(2,100,43), NAMESC(150,2), EQUI, SHIFNM
                                                                                                                                        SYST
                                                                                                                                                          21
22
                             INTEGER EQUI, SHIFMH
                    C
 6.
                                                                                                                                        SAST
                                                                                                                                                          24
25
                                                      - COUNT OF DIFFERENT AFFROPRIATION CODES - APPROPRIATION CODE NAMES
                                                                                                                                        SYST
                               NAP
                    č
                               APPROL I
                                                                                                                                         SYST
                                                      - MPPROPRIATION COUR NAPES
- PERCENTAGES FOR COS ELEMENT COST SPLITS
- COUNT OF THE LIFE CYCLE PHASES
- FIRST COS LLIMENT NUMBER OF EACH FHASE
- COS ELEMENT NUMBER FOR PAGE BREAKS
(LAST COS NUMBER FOR THE PAGE)
- TITLES OF COS PHASES
ELEGT (SYSTEM) STRE
                                                                                                                                                          27
26
                               SPCL( , )
                                                                                                                                        SYSI
                                                                                                                                        SYST
                    C
 65
                               NPH
                               IPH( )
                                                                                                                                         SYST
                                                                                                                                        12 Y2
                                                                                                                                                          32
31
                               IPB( I
                               IPHASE( , )
                                                                                                                                         SYST
                                                      - FLEET (SYSTEM) SIZE
- LOWEST LOST FLEMENT LEVEL TO BE PHINTED
(LOWEST LEVEL TO BE HOLLEG UP WITHIN PHASE)
                               FLEETZ
                                                                                                                                        72Y2
12Y2
                               NPOLL ( )
                                                                                                                                                          24
35
                                                                                                                                        SYST
                                                      - TOTAL RUTLE COST
- TOTAL INVESTMENT COST MINUS TOTAL RIFOUT
- TOTAL RIFOUT COST
- MISSILE HOTEE COST
- NUMBER OF CBS ELEMENTS TO BE INCLUCED IN
                                                                                                                                        SYST
                                                                                                                                                          26
37
                               ROTOT
                    C
                               TOTINA
                                                                                                                                         SIST
                               TOTRIF
 75
                               SHISRE
                                                                                                                                         SYST
                                                                                                                                                          39
                    CCC
                                                                                                                                                          40
                               NOFLY
                                                                                                                                         SYST
                                                          FLYAHAY COSTS
                                                                                                                                         SYST
                                                                                                                                                          41
                                                      - CBS ELEMENT NUMBER FOR FLYAMAY COSTS
- NUMBER OF YEARS IN SHIP INSTALLATION TABLE
- YEARS CUVERED BY THE SHIP INSTALLATION TABLE
                               IFLYRCH( )
                                                                                                                                        SYST
                                                                                                                                                          42
                    CCC
 40
                               NOVES
                               IYEARS
                                                                                                                                         SYST
                                                       - NUMBER OF YEARS IN SHIP INSTALLATION TABLE PLUS ONE ICOLUMNS FOR PRINTING SHIP/INST TABLE) - FOCTNOTES FOR FIRST TWO MAJOR OLTFUT CHARTS
                               IYRS
                                                                                                                                         SYST
                                                                                                                                                          46
                                                                                                                                        SYST
                                                                                                                                         SYST
                               FNOTES( , )
                                                                                                                                                          48
 45
                                                                                                                                        SYST
                              COMMON / MISC / NAF.AFPRO(7).SFCL(3.6.2).NPH.IFH(4).IPB(3).
                                                                                                                                        SYST
                                            IPHASE (2,4), FLEET Z, NROLL (4), RCTOT, TUTINV, TCTRIF.
                                                                                                                                         SYST
                                                                                                                                        TRYET
                                                                                                                                                         51
52
                                            SMISRD, NOFLY, IFLYROW (25), NCYRS, IYEARS (12), IYRS,
                                            FNOTES (5.12)
 ٩Ł
                              INTEGER APPRO, SPIL, FLEETZ
                                                                                                                                         1212
                                                                                                                                        SYST
                    C
                                                                                                                                                         16
17
                                                                                                                                        RCLCNT
                             ROLLTOT = 0
                                                                                                                                         ROLCNT
                    C
                                                                                                                                        ROLCHT
                                                                                                                                                          18
                                                                                                                                        RCLCN1
HCLLNT
                             DO 10 I=1.NW8S
 95
                                                                                                                                                          50
                    c
                                                                                                                                                          21
22
23
                              IF ( I .EQ. 1 ) NOUT = NROLL(1)
                                                                                                                                        FCLCNT
                             IF ( I .EG. (IFB(1) + 1) ) NOUT = NR(LL(2) IF ( I .EG. (IFB(2) + 1) ) NOUT = NR(LL(3)
                                                                                                                                         ROLCNT
                                                                                                                                                         24
100
                              IF ( I .EG. (IPB(3) + 1) ) NOUT = NRCLL(4)
                                                                                                                                        FCLCKT
                    C
                                                                                                                                        ROLCHT
                                                                                                                                                         26
27
                              IF ( I#OLL(I) .61. NOUT ) GO TO 10
                                                                                                                                        ROLCHT
                    C
                                                                                                                                        RCLCNT
                              #OLLTOT = KOLLTOT + 1
ROLLSL(RCLLTOT) = I
                                                                                                                                        ROLCAT
                                                                                                                                                         28
29
                                                                                                                                         RCLCHT
1.5
                    C
                                                                                                                                        ACLENT
                                                                                                                                                          30
                        10 CONTINUE
                                                                                                                                        HOLONT
                                                                                                                                                          31
                    ¢
                                                                                                                                        ROLCHT
                              RETURN
                                                                                                                                        ROLCHT
                                                                                                                                                          33
110
                              END
                                                                                                                                        RCLCNT
```

```
SUFFOUTINE OUT1
                                                                                                     FTH 4.6+433
                                                                                                                                   07/31/79 23.53.41
                                      74/74
                                                0PT=2
  1
                             SUBROUTINE OUT: (ICALL)
                                                                                                                                       CUT1
                                                                                                                                                         3
                                                                                                                                       CUT1
                   C THIS SUBROUTINE, OUT1, HILL GENERATE OUTFUT FOR ALL NINGS C COST FLEMENTS FOR THE FLEET SUMMARY CHARTS, THE UNIT SHIF CUSTS CHARTS, OR THE SHIP CLASS SUMMARY COSTS CHARTS.
                                                                                                                                       CLTI
                                                                                                                                       CUTI
                                                                                                                                       CUTI
                                           ICALL = 1 FL_ET SUMMARY CHARTS
ICALL = 2 UNIT SHIP COSTS
ICALL = 3 SHIP CLASS SUPMARY CHARTS
                                                                                                                                       CUT1
                                                                                                                                       0U 1 1
                                                                                                                                       CLII
                                                                                                                                      0011
                                                                                                                                                        10
14
                   C
                            ARRAY CONTAINING APPRO CODE, CBS NUMBER, COST ELEMENT IL COMMON / APELOUT / INORO(150,5)
                                                                                                                                      AFELOUT
                                                                                                                                       MS2
                      PS 2
                                                                                                                                      MS2
15
                   c
                                                                                                                                      MS2
                                                     - MASS STORAGE UNITS COMMON RECORD LENGTH
(TYPICALLY 150)
- NUMBER OF ELEMENIS IN THE CBS (MAX 150)
- NUMBER OF EQUIPPENTS IN THE EQUIPMENT
                              1 F NR
                                                                                                                                      MS Z
                              NWRS
                                                                                                                                      ۲SZ
                   C
                              ICCTR
                                                                                                                                      MSZ
20
                                                         ELEMENTS TABLE
                                                                                                                                      FS2
                                                                                                                                                       10
                                                     - (150 HORCS) RECORD LENGTH OF 7 ARRAYS
IN THE "CERVLS" COMMON
                             L150
                                                                                                                                      M52
                                                                                                                                                       11
                                                                                                                                      MS Z
                             L900
                                                         1940 HORCS) RECORD LENGTH OF 2 ARRAYS
                                                                                                                                      MS2
                                                                                                                                                       13
                   C
                                                         IN THE "CERVLS" COMMON
                                                                                                                                      MS2
                                                                                                                                                       14
25
                                                                                                                                      FS2
                            COMMON / MS2 / LENK, NH85, ICCTR, L154, L190
                                                                                                                                      MS2
                                                                                                                                                       16
17
                   C
                                                                                                                                      MSZ
                                                                                                                                      MSE
                                                                                                                                      MSZ
                                                                                                                                                       19
                   C HESCUT KOUTINE LUMPUTED VALUES, ARRAYS AND CONTROLS NEEDED C FOR THE OUT1 SUBROUTINE C KSC AFRAY - SHIP NAMES
 3 ?
                                                                                                                                      CUTCHTS
                                                                                                                                      CUTCHIS
                                                                                                                                      CUTCKTS
                                                        - OUTPUT COLLMN FLAG

= 0 COMPS OR SHIPS LESS THAN 5

= 1 CUMPS OR SHIPS GREATER THAN 9
                                 IFLGCL
                                                                                                                                      OUTCHTS
                                                                                                                                      CUTCKTS
 76
                                                                                                                                      CUTCHTS
                  C
                                                           = 2 LAST SET
PAGING FLAG
                                                                                                                                      OUTCHTS
                                 IFG
                                                                                                                                      CUTCNIS
                                                           ENCOCEU FORMAT 110
ENCOCEU FORMAT 120
                                 FHT110 ARKAY
FHT120 ARKAY
                   C
                                                                                                                                      CUTCHTS
                                                                                                                                                       10
                                                                                                                                      CUTCHTS
                  0000000
                                                           ENCODED FORMAT 120
COMPONENT OR SHIF NAMES FOR COLUMN HEADINGS
INDICES FOR THE KPR ARRAY
HOLLERITH CHARACTERS "TOTAL"
SUMMATION ARRAY FOR FINAL COSTS OF EITHER
                                                                                                                                                       11
                                 KPR ARRAY
                                                                                                                                      OUTCATS
                                 KC, KI
ITOTAL
                                                                                                                                      OUTCATS
                                                                                                                                                       13
                                                                                                                                      CLICKIS
                                                                                                                                                       14
                                 TOT AFRAY
                                                                                                                                      QUICNES
                                                                                                                                                       15
                                                           CCHPONENTS OR SHIPS
                                                                                                                                      CITCHTS
                                                                                                                                                       16
45
                                 KCT
                                                           INDEX FOR THE AMORE AFRAY CONTAINS THE COSTS FOR ALL THE NHBS VALUES
                                                                                                                                      GUTCHTS
                                                                                                                                                       17
                                 ANDED ARRAY
                                                                                                                                      CUICNIS
                                                                                                                                                       18
                                                           FOR AT MUST 10 CCMPONENTS OR SHIPS KSC(?), IFLCCL, IPG, FMT1101(14), FMT120(4), KPK(20), KC, K1, ITOTAL, TOT(150), KCT, AWORD(15J, 10)
                                                                                                                                      CUTCHTS
                                                                                                                                                       19
                            COMMON / OUTCNIS /
                                                                                                                                      CLICKTS
                                                                                                                                      GLICHTS
                                                                                                                                                       21
5.
                                                                                                                                      CLICHTS
                                                                                                                                                       22
                           3, FMT123(4), KHOND(3), JHOPD(3), UNITFLY(45), TOTUFLY, SHIFFLY(43)
                                                                                                                                      CUTCHTS
                           4,TOTSHIP
                                                                                                                                      CUICNIS
                                AFRAY DEFINING THE ROLL-UP INPUT NUMBERS, TOTAL COUNT OF COST ELEMENTS WITH SPECIFIC ROLL-UP NUMBERS TO BE CLIPUT, AFRAY OF SELECTED MBS ELEMENTS NUMBERS, SELECTED ROLL-UP
                  C
                                                                                                                                      RCLLPCT
                                                                                                                                      HCLLFCT
• 5
                                                                                                                                      ROLLFCT
                                                                                                                                                        5
                                 OUTFUT FLAG
                                                                                                                                      FCLLFCT
                            COMMON / ROLUPCT / IROLL(150), FOLLTOT, ROLLSL(150), ROLLFLG
                                                                                                                                     ROLLFCT
```

```
.7/31/79 23.53.41
   SUBABUTINE OUT1
                              74/74 061=2
                                                                                    FTN 4.6+435
                        INTEGER ACLLTOT, HOLLSL, HOLLFLG
                                                                                                                SCLUFET
                                                                                                                RCLLFCT
                                                                                                                               8
                  RCLUECT
                                                                                                                               y)
                                                                                                                ROLLPCT
                                                                                                                              10
                                                                                                                CHEFTS
                                                                                                                               2
                  CHAFTS
                                                                                                                CHA ITS
                                                                                                                CHEFTS
                         CHRICAT CONTAINS THE MAJOR OUTPUT LHALT CONTROLS
                                                                                                               CHAFTS
                C
                                                                                                                               6
                                         - GENERATE CHART
- NO GENERATION OF CHART
                                                                                                                CHAFTS
                                                                                                                CHAFTS
                                                                                                               CHEFTS
                                                                                                                               9
                                            - IF EQUAL TO 0 - CALLS MESOUT(1) FCK EQUIFMENT
ELEMENT LIFE CYCLE CCSTS - FLEET SUPMARY
- IF EQUAL TO 0 - CALLJ MESOUT(2) FOR UNIT
SHIP COSTS BY ECUIPMENT ELEMENT
 7 î.
                         CHRTCAT (1)
                                                                                                                CHARTS
                                                                                                                              14
                                                                                                                CHARTS
                                                                                                               CHAFTS
                C
                         CHRICKT (2)
                                                                                                                              12
                                                                                                                CHARTS
                                                                                                                              13
                                             - IF NE. TO 0 - CALLS MESTOT BECAUSE MESOUT(2) MAS NOT CALLE C
- IF EQUAL TO 0 - CALLS MESOUT(3) FCR SHIP
                                                                                                                CHAFTS
                                                                                                                CHAFTS
 75
                C
                                                                                                                              15
                                            - IF EQUAL TO 3 - CALLS BLDGOP FOR LIFE CYCLE COSTS BY BUDGET AFPROFRIATIONS - TE NE. TO 3 - CALLS ROLONT FOR CUTPUT BY
                                                                                                                CHA FTS
                         CHRTCAT (3)
                                                                                                                CHASTS
                                                                                                                              17
                                                                                                                CHAFTS
                         CHRTCAT (4)
                                                                                                                              15
                                                                                                                CHAFTS
                                                                                                                              19
 46
                         CHRICAT (5)
                                                                                                                CHAFTS
                                                                                                                              20
                                               RULL-UP NUMBER
                                                                                                                CHAFTS
                C.
                                                                                                                              21
                                             - IF EQUAL TO 0 - LISTS THE SUBELS ARRAY FOR ENTIRE CBS FOR PROOFING
                                                                                                                CHAFTS
                         CHRTCNT (6)
                                                                                                                CHAITS
                                                                                                                CHAITS
                                                                                                                              24
25
                c
 .16
                                                                                                                CHAFTS
                        COMMON / CHARTS / CHRTCHT(15)
INTEGER CHRTCHT
                                                                                                                CHERTS
                                                                                                               CHAFTS
                                                                                                                              27
                c
                                                                                                                SYST
                                                                                                                               2
                SYST
                                                                                                               SYST
 91
                C
                                             - NAME OF THE SYSTEM
                                             - TOTAL NUMBER OF SHIPCLASSES CONSIDERED
- NAME OF THE SHIPCLASS IN TWO MORCS
- INDEX NUMBER FOR EQUIPMENTS (COMPONENTS)
                Ċ
                         NOSLB
                                                                                                                SYST
                         NMSUBI . )
                С
                                                                                                               SYST
                                                                                                                SYST
                         (RUMNING TOTAL FOR EQUIPMENTS)

NHCOMF( , , ) - NAMES OF EQUIPMENT (2 MORDS) FOR TITLES

IN MESOUT (INCLXED BY EQUIPMENT NUMBER
                                                                                                                SYST
 95
                C
                                                                                                               SYST
                                                                                                                              10
                                                                                                                SYST
                                                                                                                              11
                                             AND SHIPCLASS NUMBER)
- NAMES OF EQUIPMENT(2 HOFOS, 7 CHARS EACH)
                                                                                                                SYST
                C
                         NAMESC( , )
                                                                                                               SYST
                                                                                                                              13
                                               FOR EQUIPMENT QUANTITIES TABLE - FLEET
                                                                                                                SILT
130
                                               SUMMARY
                                             - PRESENT EQLIFMENT (BEING PROCESSED)
- PRESENT SHIPCLASS (BLING PROCESSED)
                                                                                                                              16
17
                C
                         FOUT
                                                                                                               SYST
                         SHIFNE
                                                                                                                TEYE
1 5
                C
                                                                                                               SYST
                                                                                                                             19
                                   NAMES / NHSYS, NOSUB, NMSUB(2,43), NCCUHP(43), NHCOMP(2,1u3,43), NAMESC(1u3,2), EQUI, SHIPNM
                        COMMEN / NAMES
                                                                                                                SYST
                                                                                                                              žΨ
                                                                                                               $151
                        INTEGER EQUI, SHIPNH
                                                                                                               SYST
                                                                                                                              22
                               *******MISC (MISCELLANEOUS) COMMON **************
                                                                                                                              23
114
                                                                                                               SYST
                         NAP
                                             - COUNT OF DIFFERENT APPROPRIATION CODES
                C
                                                                                                               SIST
                                                                                                                              25
                                            - APPROPRIATION COOF NAMES
- PERCENTAGES FOR CBS ELEMENT COST SPLITS
                Ċ
                         APPRO()
                                                                                                               SYST
                                                                                                                              26
                C
                         SPCL( , )
                                            - COUNT OF THE LIFE CYCLE PHASES
                         NPH
                                                                                                               SYSI
                                                                                                                              20
```

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G7 / 31/79 23.53.41
     JUEN OUTTNE OUTL
                                           74/74 0+1=2
                                                                                                               FTN 4.6+433
                                                           - FIRST CBS ELLMENT NUMBER OF EACH PHASE - UBS ELLMENT NUMBER FOR PAGE BREAKS
115
                                  TPH( )
                                                                                                                                                    SAST
                                                                                                                                                                       29
                                  198( )
                                                                                                                                                     SYST
                                                                (LAST CBS NUMBER FOR THE PAGE)
                                                                                                                                                    SYST
                                                                                                                                                                       31
                                                           - TITLES OF CBS PHASES
- FLELT (SYSTEM) SIZE
- LOWEST COST (LEMENT LEVEL TO BE FPINTED (LOWEST LEVEL TO BE ROLLED UP HITHIN PHASE)
                                  IPHASE( , )
                                                                                                                                                     SYST
                                                                                                                                                                       33
126
                                  NEGLL ( )
                                                                                                                                                     SYST
                                                                                                                                                                       34
                                                           - TOTAL ROTLE COST
- TOTAL INVESTMENT COST MINLS TOTAL RIFOUT
                                  ROTGT
                                                                                                                                                    SYST
                                                                                                                                                     SYST
                                   TOTRIF
                                                               TOTAL RIFOUT COST
                                                           - MISSILE ROTTE COST
- NUMBER OF COS ELEMENTS TO BE INCLUCED IN
                                                                                                                                                                       29
1.25
                                  SMISRE
                                                                                                                                                    SYSI
                                  HOFLY
                                                           FLYAMAY COSTS

- CBS ELEMENT NUMBER FOR FLYAMAY COSTS

- NUMBER OF YEARS IN SHIP INSTALLATION TABLE

- YEARS COVERED BY THE SHIP INSTALLATION TABLE
                                                                                                                                                    SYST
                                  TELYFORE 1
                                                                                                                                                     SYST
                                  NOTES
                                                                                                                                                    SYST
                                  IYEAFS
IYRS
130
                                                                                                                                                    SYST
                                                               NUMBER OF YEARS IN SHIP INSTALLATION TABLE
                                                               PLUS ONE (COLUMNS FOR PRINTING SHIF/INST TABLE)
                                                                                                                                                    SYST
                                                           - FOOTNOTES FOR FIRST THU MAJOR OUTPUT CHARTS
                      c
                                  ENGTES ( . )
                                                                                                                                                    5 15 7
                                                                                                                                                                       47
                                COMMON / MISC / NAF, AFPRO(7), SPCL(3, E, 2), NPH, IPH(4), IFE(3),
1.35
                                                                                                                                                    SYST
                                                                                                                                                                       49
                                                IFHASE(2,4), FLEETZ, NROLL (4), FCTOT, TOTINY, TOTFIP, SMISRO, NOFLY, IFLYFCH (25), NOYRS, IYEARS(12), IYES,
                                                                                                                                                    SYST
                                                                                                                                                    SYST
                                                FNUTES (5.12)
                                                                                                                                                    SYST
                                                                                                                                                                       52
                                INTEGER AFFRO, SPCL, FLEETZ
146
                      C
                                                                                                                                                    SYST
                                                                                                                                                                       54
                                                                                                                                                    CUT1
                                DATA IELANK/1H /, IPLUS/1H+/, IONE/1H1/, IZERO/1H0/, IMINUS/1H-/
DATA KHORD(1) / 19HUNIT FLYAH /
DATA KHORD(2) / 10HAY COST /
                                                                                                                                                    QUT1
                                                                                                                                                    CUII
                                                                                                                                                                       19
                                                                                                                                                    CUT1
                                DATA KHORE(3) / 10H /
DATA JECRE(1) / 10HSHIP FLYAW /
145
                                                                                                                                                    CUII
                                                                                                                                                    CUII
                        DATA JhCRC(1) / 10HSHIP FLYAW /

DATA JhCRD(2) / 10HAY GOST /

OATA JhCRD(2) / 10HAY GOST /

OATA JhCRD(3) / 19H /

1u1 FORMAT (A1.51x, *LQUIPMENT ELEMENT LIFE CYCLE CCSTS*)

102 FORMAT (A1.55x, I4.* SHIP FLEET SUPMARY*)

103 FORMAT (A1.55x, ZA1), *PMASL*)

104 FORMAT (A1.55x, ZA1), *PMASL*)

105 FORMAT (A1.53x, *(FY79 $M1*)

105 FORMAT (A1.52x, ZA1), *SHIP CLASS - UNIT SHIP COSTS BY*,

1* EQUIFMENT FLEMENT*)

106 FORMAT (A1.51x, *LIFE CYCLE COSTS -*, I4.* SHIP FLEET*)

107 FORMAT (A1.55x, *SHIP CLASS COST SUMMARY*)

114 FOFMAT (A1.136(1H-) / 1x)
                                                                                                                                                    CU11
                                                                                                                                                    CLI1
                                                                                                                                                    CUTI
156
                                                                                                                                                    CLII
                                                                                                                                                                       26
                                                                                                                                                                       27
                                                                                                                                                    CLII
                                                                                                                                                    CUI 1
                                                                                                                                                    1100
                                                                                                                                                                       29
155
                                                                                                                                                    CUT1
                                                                                                                                                    CUT1
                                                                                                                                                    CLIS
                                                                                                                                                    CLII
                     C DO-LOOP FOF ALL NHES VALUES
164
                                                                                                                                                    0U11
                                                                                                                                                    CUII
                                                                                                                                                    CU11
CU11
                                ICHAFTS = CHRTCHT(5)
                                KELMATS = NMPS
                                                                                                                                                                       39
                                IF (ICHARTS-NE-J.AND.ICALL-NE-1) KELMNTS = ROLLTOT
                                DO 34 MELHATS
1 65
                                                                                                                                                    CLII
                                                                                                                                                                       41
                                                                                                                                                    0111
                                IF (ICHARTS-NE-G.AND-ICALL-NE-1) I = ROLLSL(K)
                                                                                                                                                    Cu11
                     C
                                                                                                                                                   CUTI
                                                 CHECK FOR PAGE BREAKS FOR NEW HEADINGS
                                                                                                                                                    CUT1
176
                                                                                                                                                    GUI 1
                      C LINE 1 OR WES ELEMENT 1 ALWAYS FORCES A PAGE BREAK!
```

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47/31/79 23.53.41
                                           74/74 GPT=2
                                                                                                                 FTH 4.6+433
     SUEFOUTINE OUT1
                      C EACH M9S ELEMENT MHICH IMPLOIATELY FOLLOWS ONE OF THE LINE NUMBERS C SPECIFIED IN THE "IPB" ARRAY FORGES A FAGE BREAK: OF TO FORCE FEMEP PAGE BREAKS SET THO OR MORE MEMBERS OF "IPB" C LOUAL TO THE SAM! LINE MUMBER (IN ELOCK LATA "INIT"): C TO SUPPRESS ALL PAGE BREAKS OTHER THAN LINE 1 ON MBS ELEMENT 1 C SET ALL 3 "IFB" VALUES EQUAL TO 1.
                                                                                                                                                       CUT 1
                                                                                                                                                       CUII
                                                                                                                                                       CUT1
                                                                                                                                                                          50
                                                                                                                                                                          51
175
                                                                                                                                                       CLII
                                                                                                                                                       CLI1
                                                                                                                                                       CUII
                                                                                                                                                                          53
                                                                                                                                                       CLII
                                                                                                                                                                          54
55
                                IF ( I . EQ. 1 ) GO TO 1C

IF ( I . EQ. (IPB(1) + 1 ) ) GC TO 10

IF ( I. eQ. (IPE(2) + 1 ) ) GO TO 10

IF ( I. EQ. (IFE(3) + 1 ) ) GO TO 10
                                                                                                                                                       CUTI
                                                                                                                                                       CLII
                                                                                                                                                                          56
57
                                                                                                                                                       Culi
                                                                                                                                                       CUII
                                 GO TO 20
                                                                                                                                                       CU11
                                                                                                                                                                          59
                                                                                                                                                       CUII
                                                                                                                                                                          ٤ũ
                            19 CONTINUE
                                                                                                                                                       CLTI
                                                                                                                                                                          έı
1 45
                                                                                                                                                       GU T 1
                      С
                                 UU 1PUT HEADINGS
IPG = IPG + 1
                                                                                                                                                       CUT1
                                                                                                                                                                          €3
                                                                                                                                                       CUII
                                                                                                                                                                          64
65
                                 CALL HEAG
                                                                                                                                                       CUTI
                                                                                                                                                                          66
67
190
                      С
                                                                                                                                                       OUT1
                                 GO TO (60,40,50) ICALL
                                                                                                                                                       CU11
                            40 CONTINUE
                                                                                                                                                       OUT1
                                                                                                                                                                          66
                                 WRITE (6,195) 1MINUS, KSC(1), KSC(2)
WRITE (6,196) IBLANK, FLEETZ
                                                                                                                                                                          69
70
                                                                                                                                                       CLII
                                                                                                                                                       0111
195
                                 GO TO 78
                                                                                                                                                       CU11
                                                                                                                                                                          71
                                                                                                                                                                          72
73
                                CONT INLE
                                                                                                                                                       CUT1
                                 WRITE (6,107) IMINUS
WRITE (6,106) IBLANK, FLEET Z
                                                                                                                                                       CU I 1
                                                                                                                                                       CU11
                                                                                                                                                                          74
75
76
77
                                 GO TO 70
                                                                                                                                                       CUI1
                           60 CONTINCE
                                                                                                                                                       CU11
204
                                 WRITE (6,101) IMINUS
                                                                                                                                                       CUT1
                           WRITE(6, 132) 18LANK, FLEET 2
70 CONTINUE
                                                                                                                                                       CUT1
                                                                                                                                                                          78
79
                                                                                                                                                       0011
                                 HRITE(E, 103) ISLANK, IFHASE (1, IFG), IPHASE (2, IPG)
                                                                                                                                                       CUTI
                                 WRITE (6,104) IBLANK
WRITE (6,114) IBLANK
255
                                                                                                                                                       CUII
                                                                                                                                                                          81
                                                                                                                                                                          62
                                                                                                                                                       CUTI
                                                                                                                                                       CUT1
                               IF ( IFLGCL .NE. 1 ) WRITE (6,FMT110) (KPR(J),J=1,KC), (KFR(J), 1J=11,K1), ITGTAL

IF ( IFLGCL .EO. 1 ) WRITE (6,FMT110) (KPR(J),J=1,KC), (KPR(J),
                                                                                                                                                                          84
85
                                                                                                                                                       CUT 1
                                                                                                                                                       CU11
                                                                                                                                                       CU11
                                                                                                                                                                          25
27
28
                               1J=11,K1)
                                                                                                                                                       CU11
                                                                                                                                                       CU I 1
                                                  OUTPUT THE MBS COST ELEMENT FOR THESE COMPONENTS
                                                                                                                                                       CUTI
                            20 CONTINUE
                                                                                                                                                      GLT1
                                                                                                                                                                          90
91
                                 IF ( IFLECL .NE. 1 ) HRITE (6, FHT120) (IHORD(I,N),N=1,5),
                                                                                                                                                       CUT1
215
                               IF (IFLGCL.NE. I) WRITE (6,FHT120) (IWURU(1,N7,N=1,5),
I(AHORO(I,N),N=1,KCT), TOT(I)
IF(IFLGCL.E0.1) GO TO 201
IF (ICALL.NE.1) GO TO 201
IF(II.EC.(IPH(3) - 1)) HRITE(6,FHT123) IZERO,(KHCRC(N),N=1,3),
                                                                                                                                                      CUTI
                                                                                                                                                                          93
                                                                                                                                                       CUI1
                                                                                                                                                       CUII
                                                                                                                                                                          90
97
98
220
                               1 (UNITELY IN), N=1, KCT), TOTUFLY
GO TO 203
                                                                                                                                                      CLT1
                                                                                                                                                      CLT1
                          201 IF(I=£C.(IPH(3)-1)) WRITE(6,FH1123) IZERO, (JMORC(N),N=1,J), 1(SHIFFLY(N),N=1,KCT),TOTSHIP
                                                                                                                                                      CUII
                                                                                                                                                                         99
                          200 CONTINUE
                                                                                                                                                      CUII
                                                                                                                                                                        160
225
                                 IF ( IFLGCL .EQ. 1 ) WFITE (6.FMT120) (INORO(I,N),N=1,5),
                                                                                                                                                                        161
                               1(AMORD(I,N),N=1,KCT)
IF(IFLEGL.NE.1) GO TO 30
IF (ICALL.NE.1) GO TO 202
                                                                                                                                                       CU11
                                                                                                                                                                        102
                                                                                                                                                      CUII
                                                                                                                                                                        163
                                                                                                                                                       OLTI
```

| | SUEMOUTINE | 0171 | 74/74 | CFT≈2 | | FTN 4.6+433 | 6//31/75 | 23,53,41 |
|-------|------------|-------|------------------|----------------|-------------------|---------------------|----------|----------|
| | | | IF(I.FG.(IPH | (3)-1)) WKITE | (6,FMT123) 12°n0, | (KHURU (N), N=1,3), | 0011 | 1 u5 |
| 236 | 3 | | 1 (UNITELY (N), | 4= 1,KCT) | | | CLII | 166 |
| | | | GO TC 38 | | | | CUT1 | 197 |
| | | 2 ĉ 2 | IF (I.EC. (IPH | (3)-11) WHITE | (6,FFT123) IZERO. | (JHCRE(N), N=1,3), | CUT1 | 166 |
| | | | 1 (SHIPFLY (N) . | N= 1.KCT) | | | CUII | 169 |
| | | С | | | | | CUI: | 110 |
| 2 3 5 | ; | 3) | CONTINUE | | | | CUII | 111 |
| | (| 3 | | | | | GL11 | 112 |
| | | | LO 80 F=1.5 | | | | CLT1 | 113 |
| | | | WRITE(6, 124) | (FNUTES (M. L) | , L=1, 12) | | CUII | 114 |
| | | 80 | CONTINUE | | | | 0111 | 115 |
| 24. | | 124 | FORMAT (1H0,6) | (,12A1u) | | | CUII | 116 |
| | | | RETURN | | | | CU 1 1 | 1 17 |
| | | | ENO | | | | CUT1 | 110 |

APPENDIX B

INPUT FORMAT GUIDE

This input format guide provides the user with a summary of the format for the input file to SAFSCAM. The input variables are named as they are read by the READ statements in the INPUPD subroutine and will vary slightly from the descriptive names given in the main text.

| Card Types | Input | Card Columns | Format |
|------------|--|--------------|---------|
| 1 | TITLE Identifies case run | 1-26 | 2A10,A6 |
| 2 | NWBS number of cost elements in CBS | 1-5 | 15 |
| | NPH number of phases in CBS | 6-10 | 15 |
| | IPB (1) page break | 11-15 | 15 |
| | IPB (2) page break | 16-20 | 15 |
| | IPB (3) page break | 21-25 | 15 |
| 3 | IPHASE (1,K) name of Kth phase in 2 words | 1-10 | A10 |
| | IPHASE (2,K) | 11-20 | Al0 |
| | IPH (K) first CBS element of | | |
| | Kth phase | 21-25 | 15 |
| | NROLL (K) lowest cost level of | | |
| | Kth phase | 26-30 | 15 |
| | (Up to four card type 3s may be used, one for each of 4 phases, $K = 1, 4$) | | |
| 4 | INP(1) SYSTEM | 1-6 | A6* |
| | INP(2) System name | 11-20 | A10 |
| 5 | INP(1) TPUT | 1-4 | A4* |
| 6 | INP(3) CBS element number | 1-20 | A10 |
| | INP(3) budget appropriation code | 21-30 | |
| | INP (4) CBS element name | 31-40 | A10 |
| | INP(5) CBS element name | 41-50 | A10 |
| | INP(6) CBS element name | 51-60 | A10 |
| | INP(7) CBS element number | 61-70 | A10 |
| | INP(8) cost level | 71-72 | A2* |
| 7 | INP(1) NPUT | 1-4 | A4* |
| 8 | INP(1) SHIPCLASS | 1-10 | A10 |
| | INP(2) first word of ship | 11-17 | A-7* |
| | class name (centered) | | |
| | INP(3) second word of ship class | | |
| | name | 21-27 | A-7* |
| 9 | INP(1) Equipment | 1-10 | A10 |
| | INP(2) first word of equipment element | | - |
| | name - centered | 11-17 | A7* |

The state of the s

| Card Types | | Input | Card Colu | mns Format |
|------------|---------------------|--------------------------|-----------|------------------|
| | TNP(3) second wo | ord of equipment name | | |
| | - centere | <u> </u> | 21-27 | A7* |
| | INP (4) | | 30-40 | |
| | INP(5) O&S quant | ity per ship | 41-45 | |
| | INP(6) INV. quan | | 51-59 | - · · |
| | | tion code for Proc | 61-63 | |
| | | ("SCN", "OPN", | | |
| 10 | INP(1) SEND | | 1-4 | A-4* |
| 11 | INP(1) EQUIPMENT | • | 1-10 | Al0 |
| | INP(2) first wor | | 11-30 | A10 |
| | elevation | | | |
| | INP(3) second wo | ord equipment | 31-40 | A10 |
| | elevation | | | |
| | | | | |
| 12 | INP(1) TPUT | | 1-4 | A-4 |
| | | | | |
| 13 | INP(1) CBS eleme | ent number | 1-20 | |
| | INP(3) CBS eleme | | 21-30 | |
| | INP(4) CBS eleme | | 31-40 | |
| | INP(5) CBS eleme | | 41-50 | |
| | INP(6) CBS eleme | | 51-60 | |
| | INP(7) CBS eleme | ent cost | 61-70 | |
| | INP(8) CBS eleme | ent cost | 71-80 | AlO |
| 14 | INP(1) CER | | 1-3 | A-3 |
| 15-a | CEREND (blank) | | 1-4 | A-5 |
| 13-a | | " caculation type | 6 | A-1 |
| | | CBS element or subelemen | • | ** * |
| | | CBS element number | 7-9 | 13 |
| | ADDID CBS subele | | 10 | 11 |
| | | number subelement | | |
| | 1 - 6 = a subele | | | |
| | CERNO CER number | | 11-15 | 15 |
| | XREFNO CBS eleme | ent cross-reference | | |
| | number | | 16-19 | 14 |
| | XREFAD CBS subel | lement cross-reference | | |
| | number $(0 = no s)$ | subelement, | 20 | Il |
| | 1 - 6 = a subele | ment) | | |
| | | | FS(11) | PS(11) |
| | FS(II) P(1) fac | tor identification | 21, | 22-30 6(Al,F9.0) |
| | P(2) (F | = factor, blank = value) | | 32-40 |
| | PS(II) P(3) par | ameter | 41, | 42-50 |
| | P(4) | | 51, | 52-60 |
| | P(5) | | 61, | 62-70 |
| | P(6) | | 71, | 72-80 |

| Card Types | Input | Card Columns | Format |
|------------|--|--------------|------------|
| 15-b | CEREND ECER | 1-4 | A-5 |
| 16 | INP(1) SEND | 1-4 | A-4 |
| 17 | <pre>INP(1)-INP(8) comment card for chart control</pre> | 1-80 | 8A10 |
| 18 | CHRTCNT(1) print control for: equipment LCC | 1-3 | I-3 |
| | fleet summary chart (0 = print chart) CHRTCNT(2) print control for: unit ship cost by equipment | 4-6 | I-3 |
| | <pre>chart (0 - print chart) CHRTCNT(3) print control for: ship cost summary</pre> | 7-9 | I-3 |
| | <pre>(0 = print chart) CHRTCNT(4) print control for: LCC by budget</pre> | 10-12 | I-3 |
| | <pre>(0 = print chart) CHRTCNT(5) cost level print control (0 = print complete CBS)</pre> | 13-15 | I-3 |
| 19 | <pre>INP(1)-INP(8) comment card for equipment installation</pre> | 1-80 | 8A10 |
| 20 | NOYRS numbers of years in ship installation table | 1-5 | 15 |
| | | 6-11 | 6 X |
| | IYEARS(1) first year for installation | 12-16 | 15 |
| | IYEARS (2) | 17-60 | 15 |
| | • | (etc) | • |
| | • | (etc) | • |
| | • | (etc) | • |
| | IYEARS(12) 12th year for installation | 67-72 | 15 |
| 21 | SINSTB(I,1) ship class name (left-justified) | 1-6 | A-6 |
| | SINSTB (I,2) number of ships outfitted first year SINSTB(I,13) number of ships outfitted | 11-15 | 1215 |
| | 12th years (A type 12 installation card is input for each ship. Numbers for ship to be outfitted may be input for up to 12 years). | 66-70 | |
| 22 | <pre>INP(1)-INP(8) comment card for unit flyaway cost data</pre> | 1-80 | 8A10 |

| Card Types | Input | Card Columns | Format |
|------------|---|--------------|--------------|
| 23 | NOFLY number of flyaway elements to be included in unit flyaway cost | 1-5 | 15 |
| 24 | <pre>IFLYROW(1) CBS element number for unit flyaway: IFLYROW(16)</pre> | 1-5 76-80 | 1615 |
| 25 | FNOTES (1,12) | 1-80 1-40 | 8A10 4A10 |
| | FNOTES (5,12) | 1-80 1-40 | 8A10 4A10 |
| | (Must have 10 cards for footnotes) Blank cards may be used. | | |

the state of the s

APPENDIX C

SAMPLE RUN

CARD INPUT LISTING

| TESTCASE DATA | | | | |
|---------------------|---------------|--------------------------|------------------|---|
| 148 4 35 6 | 8 108 | | | |
| RDTSE | 1 | 2 | | |
| PILCT FRODUCTION | 36 | 3 | | |
| FULL PRODUCTION | 69 | 3 | | |
| OPERATION & SUPPORT | 109 | 2 | | |
| SYSTEM SLCCM | | | | |
| TPUT | | | | |
| (1) | | RDT&L PHASE | 1 | 1 |
| (2) | | VALIDATION | 2 | 2 |
| (3) | | CONTRACTOR | 3 | 3 |
| (4) | FD/OM | SYSTEM/PROGRAM MGT | 4 | 4 |
| (5) | RDTE | SYSTEMS ENGINEERING | 5 | 4 |
| (6) | RDTE | TEST HARDWARE FAB | 6 | 4 |
| (7) | RDTE | DEVELOPMENT TEE | 7 | 4 |
| (8) | RD/MC | INDUSTRIAL FACILITIES | 8 | 4 |
| (9) | RDTE | DATA | 9 | 4 |
| (10) | RDTE | OTHER | 10 | 4 |
| (11) | | GOVERNMENT | 11 | 3 |
| (12) | RD/OM | SYSTE I/PROGRAM MGT | 12 | 4 |
| (13) | RDTE | SYSTEMS ENGINEERING | 13 | 4 |
| (14) | RDTE | TEST HARDWARE FAB | 14 | 4 |
| (15) | RDTE | DEVELOPMENT TRE | 15 | 4 |
| (16) | RD/MC | INDUSTRIAL FACILITIES | 16 | 4 |
| (17) | RDTE | DATA | 17 | 4 |
| (18) | RDTE | OTHER | 18 | 4 |
| (19) | | FULL SCALE DEVELOPMENT | 19 | 2 |
| (20) | EO 464 | CONTRACTOR | 20 | 3 |
| (21) | RD/CM RD/E | SYS/PRCG/LCG SUPT MGT | 21 | 4 |
| (22) (23) | | SYSTEMS ENGINEERING | 22 | 4 |
| (23) (24) | RDTE | TEST HARDWARE FAR | 23 | 4 |
| (25) | RDTE | FROTOTYPE TESTS | 24 | 4 |
| (26) | PD/MC | TOOLING AND IND FAC | 25 | 4 |
| (27) | RDTE RDTE | OTHER | 26 2 7 | |
| (28) | NOTE | GOVERNMENT | 28 | 4 |
| (29) | RD/OM | SYS/PROG/LOG SUPT MGT | 29 | 4 |
| (30) | ROTE | SYSTEMS ENGINEERING | 30 | 4 |
| (31) | ROTE | TEST HARDWARE FAB | 31 | 4 |
| (32) | ROTE | FROTOTYPE TESTS | 32 | 4 |
| (33) | RD/MC | TOOLING AND IND FAC | 33 | 4 |
| (34) | ROTE | DATA | 34 | 4 |
| (35) | ROTE | OTHER | 35 | 4 |
| (36) | | INVESTMENT PHASE | 36 | 1 |
| (37) | | FILOT/LIMITED FRODUCTION | 37 | S |
| (38) | | NONRECURRING | 38 | 3 |
| (39) | | CONTRACTOR | 39 | 4 |
| (40) | FR/OH | SYSTEM/PFOGRAM MGT | 40 | 5 |
| (41) | FROC | ADV PRODUCTION ENG | 41 | 5 |
| (42) | FR /OM | SYSTEM TEE | 42 | 5 |
| (43) | FRCG | LOGISTIC SUPPORT | 43 | 5 |
| (44) | FR/MC | TOOLING AND IND FAC | 44 | 5 |
| (45) | FR/CM | DATA | 45 | 5 |
| (46) | PR/CM | INITIAL TRAINING | 46 | 5 |
| (47) | FROC | OTHER | 47 | 5 |
| | | | | |

| | | | COVERANCE | , . | |
|-----|------------|----------------|---------------------------|---------------------|--|
| (| 48) | PR/CM | GOVER IMENT | 48 4 | |
| `` | 49) | | SYSTEM/PROGRAM MGT | 49 5 50 5 | |
| (| 50) | FR/CM | SYSTEM TEE | 51 5 | |
| | 51) | FRCC | LOGISTIC SUPPORT | 52 5 | |
| | 52) 53) | PR/MC | TOCLING AND IND FAC | 53 5 | |
| ì | 54) | PR/OM FR/CM | DATA | 54 5 | |
| - | 55) | FROC | INITIAL TRAINING Other | 54 5 55 5 | |
| | 56) | PRUC | RECUPRING | 56 3 | |
| | 57) | | CONTRACTOR | 57 4 | |
| | 58) | FROC | MISSION HARDWARE PROD | | |
| | 59) | FRCC | ECP/ECO | 59 5 | |
| | 60) | PR/OM | 1ST DEST TRANS/PKG | 60 5 | |
| | 61) | FRCC | RIP-OUT, INSTALL, INTEG | | |
| | 62) | FROC | OTHER | 62 5 | |
| | 63) | FROC | GOVERNMENT | 63 4 | |
| ì | 64) | FROC | MISSION HARDWARE PROD | | |
| - | 65) | FROC | ECP/ECO | | |
| ì | 66) | PR/OM | 1ST DEST TRANS/PKG | 66 5 | |
| - | 67) | FROC | RIF-OUT, INSTALL, INTEG | 67 5 | |
| ì | 68) | FRCC | OTHER | 68 5 | |
| - | 69) | PRCC | FULL PRODUCTION | 65 5 66 5 68 5 69 2 | |
| i | 70) | | NONRECURRING | 70 3 | |
| | 71) | | CONTRACTOR | 71 4 | |
| | 721 | PR/QH | SYSTEM/PROGRAM MGT | 72 5 | |
| | 73) | FRCC | PRODUCTION ENGINEERING | | |
| i | 74) | PR/OM | SYSTEM TEE | 74 5 | |
| - | 75) | FRCC | LOGISTICS SUPPORT | 75 5 | |
| Ċ | 76) | FR/MC | OPERATIONAL SITE ACT | 76 5 | |
| • | 77) | PR/MC | TOOLING AND IND FAC | 77 5 | |
| ì | 76) | PR/OH | DATA | 78 5 | |
| Ċ | 791 | PR/CM | INITIAL TRAINING | 79 5 | |
| Ċ | 80) | FRCC | OTHER. | 80 5 | |
| į | 61) | | GOVERNMENT | 81 4 | |
| Ċ | 82) | FR/CM | SYSTEM/PROGRAM MGT | 82 5 | |
| (| 83) | PR/ON | SYSTEM TEE | 83 5 | |
| 1 | 84) | FRCC | LOGISTICS SUPPORT | 84 5 | |
| (| 85) | FR/MC | OPERATIONAL SITE ACT | 85 5 | |
| (| 86) | PR/MC | TOCLING AND IND FAC | 36 5 | |
| (| 87) | FR/OM | DATA | 87 5 | |
| (| 88) | PR/CM | INITIAL TRAINING | 88 5 | |
| (| 89) | PROC | OTHER | 89 5 | |
| (| 60) | | RECURRING | 90 3 | |
| (| 91) | | CONT FACTOR | 91 4 | |
| (| 92) | FROC | MISSION HARDWARE PROD | 92 5 | |
| (| 93) | PR/OM | INITIAL SPARES | 93 5 | |
| (| 94) | PRCC | SUSTAINING ENGINEERING | | |
| (| ** . | FRCC | ECP/ECO | 95 5 | |
| (| 96) | PR/CH | 1ST DEST TRANS/PKG | 96 5 | |
| | 97) | FR CC | SUST TOOL, TEST EQUIP | | |
| | 98) | FRCC | RIF-OUT, INSTALL, INTEG | | |
| | (9) | FRCC | OTHER | 99 5 | |
| | (00) | | GOVERNMENT | 180 4 | |
| | (C1) | FRCC | HISSION HARDWARE PROD | | |
| | .02) | PR/OM | INITIAL SPARES | 102 5 | |
| | .03) | FROC | SUSTAINING ENGINEERING | 103 5 | |
| | (64) | FRCC | ECP/ECO | 104 5 | |
| | .05) | FR/OH | 1ST DEST TRANS/PKG | 105 5 | |
| | .06) | FF.CC | SUST TOL, TEST EQUIP | 106 5 | |
| _ | .07) | FRCC | RIP-OUT, INSTALL, INTEG | 107 5 | |
| (1 | .08) | FRCC | OTHER | 108 5 | |
| | | | | | |

| (1û9) | | o | PERATIONS AN | IN SUP | DOET GHASE | 4.50 |
|--------------|---------|-------|--------------|-------------|------------|-------|
| (110) | | · | OPERATIONS | .0 50, | FUNT FRASE | |
| (111) | | | CONTRACTO | 0 | | 110 |
| (112) | , | CMN | CONSUMA | DIEC. | | 111 |
| (113) | | CMN | OTHER | arr2 | | 112 |
| (114) | , | 61111 | | _ | | 113 |
| (115) | | M/HF | GOVERNMEN | . (| | 114 |
| (116) | | | URGANIZ | ATION | AL PERSONN | EL115 |
| (117) | | MN | FCOIPHE | NT LE | ASEHOLD | 116 |
| | | M/MC | OPERATI | ONAL | FACILITIES | 117 |
| (118) | | MN | CONSUMA | BLES | | 118 |
| (119) | (| MN | OTHER | | | 119 |
| (120) | | | LOGISTIC SU | PFORT | | 127 |
| (121) | | | CONTF ACT C | R | | 121 |
| (122) | (| MN | | | NAGEMENT | 122 |
| (123) | (| A M. | SYS ENG | FIFE | D SERVICE | 123 |
| (124) | | | SUPPLY | , , , , , , | D OFKATOE | 124 |
| (125) | F | R/ON | | DALTO | FREFAIR M | |
| (126) | | MA | TOAKE | ANCE | ACKAGING | |
| (127) | | MN | CAMAI | ANL F | ACKAG ING | 126 |
| (128) | | MA | OZUES TO | י טיייי | MENTATION | |
| (129) | • | 1711 | OTHER IN | | | 128 |
| (130) | _ | м к. | GOVERNMEN' | | | 129 |
| (131) | · | MN | | | NAGEMENT | 130 |
| (132) | _ | | MAINTEN | | | 131 |
| | | M/HC | MAINTE | NANCE | FACILITIE | 5132 |
| (133) | - | M/MP | MAINTE | NANCE | PERSONNEL | 1 3 3 |
| (134) | C | MN | SUPPOR | RT EQU | IP PAINT | 134 |
| (135) | C | MN | SYS ENG | FIEL | D SERVICE | 135 |
| (136) | | | SUPPLY | | | 136 |
| (137) | C | M/MF | SUFPLY | PERS | ONNEL | 137 |
| (138) | С | M/MC | SUPPLY | FACT | LITIES | 138 |
| (139) | P | R/OM | SPARE | PAETS | ,REPAIR MA | 130 |
| (140) | c | MN | INVENT | | AVELMTK LM | |
| (141) | - | MIN | TOANS | ALC D | #CKAGING | 143 |
| (142) | | MA | DATA AND | AND P | FUR MUING | 141 |
| (143) | _ | 46 | | | PENTATION | |
| 11447 | | | OTHER IL | | | 143 |
| (145) | | | CONTRACTOR - | TRAI | NING | 144 |
| (146) | | | GOVERNMENT - | | | 145 |
| (147) | | | CONTRACTOR - | | | 146 |
| (148) | C | | GOVERNMENT - | OTHE | R | 147 |
| | | TO | TAL | | | 148 |
| NEUT | | | | | | |
| | HOC | | | | | |
| | FIRST # | RADAR | 1 | | 1 | SCN |
| EQUIPMENT SI | | RADAR | 2 | | 1 | SCN |
| EQUIPMENT M | ISSILE | | 20 | | 20 | SCN |
| SHIPCLASS | FFX | | | | | 3011 |
| EQUIPMENT (| FIRST F | AGAR | 1 | | 1 | HOM |
| EQUIPMENT SE | COND F | ADAR | 2 2 | | 0 | WPN |
| EQUIPMENT M | ISSILE | | 20 | | | OFN |
| SHIPCLASS DE | | | 20 | | 20 | WFN |
| | | ADAR | 4 | | 4 | |
| EQUIPMENT SE | | ADAR | 1 | | 1 | HFN |
| EQUIPMENT MI | 21122 | PURK | 2 | | 1 | OFN |
| SHIPCLASS | AOE | | 50 | | 0 | WFN |
| <u>_</u> | | 40.40 | | | | |
| EQUIPMENT SE | | ADAR | 1 | | 1 | SCN |
| FACTURED DE | CCTLS | ADAR | 1 | | 1 | SCN |
| EQUIPMENT MI | | | 20 | | 10 | SCN |
| SHIPCLASS ZI | PGUN | | | | | |
| | | ADAR | 1 | | 1 | OPN |
| ECUIPMENT SE | | ADAR | 5 | | 3 | WPN |
| SHIPCLASS BO | | | | | | |
| | IRST R | ADAR | 1 | | 1 | WPN |
| EQUIPMENT HI | SSILE | | 40 | | 10 | SCN |
| SE NO | | | •• | | | 3014 |
| | | | | | | |

| | | | • | | | | | |
|-----------------|-------------|-------------|---------|-------|------------|------------|----------|-----------|
| (25-27) | 3, 65 | 1.35 | 2.6 | | | | | |
| (29-38) | 1.2 | 7. | •, | | | | | |
| (33-35) | 3. | 1. | 1.5 | | | | | |
| · INVESTHENT PH | ASE | | | | | | | |
| *PILOT / LIMIT | | ION | | | | | | |
| *NON RECURRING | | | | | | | | |
| (41) | 10. | | | | | | | |
| (43-47) | 2. | 10. | 2. | 1. | 5. | | | |
| *NON RECURRING | | | | •• | ,• | | | |
| (50-55) | 18. | | 3. | 1. | 4. | 2. | | |
| *RECURRING + C | | 1. | 3. | | ٠. | | | |
| | | | • • | | | | | |
| (59-62) | 1. | •1 | 3.2 | .1 | | | | |
| *RECURRING - G | | | _ | _ | | | | |
| (65-68) | 1. | •1 | . 6 | .1 | | | | |
| *FULL FRCDUCTI | | | | | | | | |
| *NONRECURRING | | | | | | | | |
| (72-76) | 5.6 | 12.3 | 2.5 | 1. | 1. | | | |
| (78-88) | 4. 2 | 3.3 | 4. | | | | | |
| *NONRECURRING | - GOVERNMEN | NT | | | | | | |
| (42-85) | 2.4 | .86 | 1. | 1. | | | | |
| (87~89) | 1.5 | 1.2 | 2. | | | | | |
| *RECURRING - C | ONTRACTOR | | | | | | | |
| (94-99) | 1. | 2. | 2.4 | 1.6 | 5.2 | 1. | | |
| *RECURRING - G | | | | | | | | |
| (163-108) | 1. | 2. | 1.05 | .7 | 20.8 | 1. | | |
| *OPERATIONS AN | | | | •• | | | | |
| *GPERATIONS - | | - marc | | | | | | |
| (113) | 5. | | | | | | | |
| *CPERATIONS - | | | | | | | | |
| (116-117) | | 3. | | | | | | |
| | 10. | 3. | | | | | | |
| (119) | 10. | | | | | | | |
| *LOGISTIC SUFF | | FACTOR | | | | | | |
| (122-123) | 1.5 | 1.3 | | | | | | |
| (125-128) | 10 • | 1. | 1.4 | 1. | | | | |
| *LOGISTIC SUPP | | RNYENT | | | | | | |
| (130) | 4. | | | | | | | |
| (132-135) | 7 • 2 | 6. | 1. | 3.2 | | | | |
| (137-142) | 3. | 3.6 | 10. | 2.3 | 1. | 1.5 | | |
| (143-147) | 1. | | 4.6 | 1.5 | 1.5 | | | |
| . NPUT | | | | | | | | |
| CER | | | | | | | | |
| C 60 1 | 8 00 | .050800 | 11.200 | 000 | 1.000000 | 5.700010 | 0.00006 | 0. (00000 |
| C 140 1 | 8 08 | .050000 | 11.200 | 000 | 1.000000 | 12.00000 | 8.496444 | 0. (00000 |
| C 230 1 | 8 00 | . 0 25 0 0 | 10.000 | 000 | 1.000000 | 48.000000 | 0.000044 | 0.00000 |
| C 240 1 | | .050000 | 40.000 | | 1.000000 | 1.000000 | 0.00000 | 0.860008 |
| C 310 1 | | . 0 25 00 0 | 10.000 | | 1.000000 | 20.006880 | 0.000006 | 0. (00000 |
| C 320 1 | | .050000 | 20.000 | | 1.000000 | 1.000000 | 0.000000 | 0.66666 |
| C 400 1 | | 100.000000 | .050 | | 1.000000 | 1.00000 | 0.000064 | 0.00000 |
| C 428 1 | | 1.500000 | 2.000 | | 10.000000 | 1.000000 | 0.00000 | 0.00000 |
| C 490 1 | | 50.0(0000 | . 450 | | 1.000000 | 1.004668 | 9.408444 | 0.446996 |
| | 1 00 | 1.484404 | .848 | | 0.000000 | 0.00000 | 0.000008 | 0.00000 |
| | 1 00 | | | | | | | |
| C 770 1 | | .6 20 0 0 0 | . 84 6 | | 0.000000 | 0.00000 | 0.00000 | 0.00000 |
| | | .009800 | •934 | | 1.140000 | 2.100000 | . 440000 | 0.400000 |
| C 860 1 | | .004200 | •934 | _ 1 5 | 1.140000 | 2.100000 | .440000 | 0.60000 |
| | 4 00 | 1.4 06000 | 150.000 | | . 64 800 0 | 0.000000 | 0.00000 | 0.00000 |
| | 8 926 | .050000 | 9.000 | | 0.000000 | 0.00000 | 0.800889 | 0.00000 |
| | 4 00 | .6 (0000 | 150.000 | | .848000 | 0.004000 | 0.00000 | 4. [84004 |
| | 8 1018 | .056000 | 0.000 | | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| | 8 926 | .1 20 00 0 | 0.000 | | 0.00000 | 0.000000 | 0.00000 | 0.00000 |
| | 2 00 | 10.0 (0000 | 1.000 | | .030000 | 150.080000 | 0.00000 | 0.00000 |
| | 8 1010 | .120000 | 0.000 | 000 | 0.00000 | 0.00000 | 0.600066 | 8. (60886 |
| ECER | | | | | | | | |
| | | | | | | | | |

```
EQUIPMENT SECOND
TRUT
*FOTLE PHASE
                             RADAR
. VALIDATION - CONTRACTOR
(4-5)
(7-10)
                            .8
                                         16.
2.72
                                                        1.2
                                                                     . 6
 VALIDATION - GOVERNMENT
(15-18) 8.8

•FULL SCALE DEVELOPMENT -

(21-22) 3.04
                                    .8
CONTRACTOR
                                                        . 8
                                                                     .8
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(103-108) .6 POPERATIONS AND SUPPORT PHASE
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*RECURRING - CONTRACTOR
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| RCLLUP | - | 2 | Po | 4 | * | 3 | 3 | 4 | J | 3 | m | 7 | | 3 | -7 | 3 | 4 | 4 | ~ | m | . | 3 | | 4 | 3 | 4 | * | m | * | 3 | 4 | | 4 | 3 | 3 |
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| COST ELEMENT | RDILE PHASE | VALIDATION | CONTFACTOR | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TAE | | | OTHER | GOVERNYENT | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAR | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | FULL SCALE DEVELOPMENT | CONTRACTOR | SYS/FRCG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAE | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | GOVERNMENT | SYS/PRCG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST MARDWARE FAR | PROTCTYPE TESTS | TOOLING AND IND FAC | CATA | 04770 |
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| APPRO | CODE | COST ELEMENT | | RCLLUP |
|------------|--------|--------------------------|----|-------------------|
| 36 | | INVESTMENT PHASE | 36 | 1 |
| 37 | | FILCT/LIMITED PRODUCTION | 37 | 2 |
| 38 | | NONRECURRING | 38 | 3 |
| 39 | | CONTRACTOR | 39 | |
| 4 C | PR/CM | SYSTEM/PROGRAM MGT | 40 | 5 |
| 41 | PROC | ADV PRODUCTION ENG | 41 | 5 |
| 42 | PR/ CM | SYSTEM TRE | 42 | 5 |
| 43 | PROC | LOGISTIC SUPPORT | 43 | 5 |
| 4 4 | PR/MC | TOOLING AND IND FAC | 44 | 5 |
| 45 | PR/OM | DATA | 45 | 5 |
| 46 | PR/OM | INITIAL TRAINING | 46 | 5 |
| 47 | PROC | OTHER | 47 | 5 |
| 48 | | GOVERNMENT | 48 | 4 |
| 49 | PR/CM | SYSTEM/PROGRAM MGT | 49 | 45555555555555555 |
| 50 | PR/GM | SYSTEM TRE | 50 | 5 |
| 51 | PROC | LOGISTIC SUPPORT | 51 | 5 |
| 52 | PR/MC | TOOLING AND IND FAC | 52 | 5 |
| 53 | PR/OM | DATA | 53 | 5 |
| 54 | PR/OM | INITIAL TRAINING | 54 | 5 |
| 55 | PRO C | OTHER | 55 | 5 |
| 56 | | RECURRING | 56 | |
| 57 | | CONTRACTOR | 57 | 4 |
| 58 | PROC | MISSION HARDWARE PROD | 58 | 5 |
| 59 | PROC | ECP/ECO | 59 | 5 5 5 5 |
| 60 | PR/OM | 1ST DEST TRANS/PKG | 60 | 5 |
| 61 | PROC | RIP-OUT, INSTALL, INTEG | 61 | 5 |
| 62 | FROC | OT H⊵R | 62 | 5 |
| 63 | | GOVE FNMENT | 63 | 4 |
| 64 | PRO C | MISSION HARDWAFE PROD | 64 | 5 |
| 65 | PRO C | ECP/EGO | 65 | 5 5 5 5 |
| 66 | PR/CM | 1ST DEST TRANS/PKG | 66 | 5 |
| 67 | PROC | RIF-OUT, INSTALL, INTEG | 67 | 5 |
| 68 | PRO C | OTHER | 68 | 5 |

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| AFPRO | CODE | COST ELEMENT | RCLLUP |
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| 69 | | FULL PRODUCTION 69 | 2 |
| 70 | | NONRECURRING 70 | 3 |
| 71 | | CONTRACTOR 71 | 4 |
| 7 2 | PR/OF | SYSTEM/PROGRAM MGT 72 | 5 |
| 73 | PROC | PRODUCTION ENGINEERING73 | 5 |
| 74 | PR/CM | SYSTEM TRE 74 | 5 5 5 |
| 7 5 | PROC | LOGISTICS SUPPORT 75 | 5 |
| 76 | PR/MC | OPERATIONAL SITE ACT 76 | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 |
| 77 | PR/MC | TOOLING AND IND FAC 77 | 5 |
| 78 | PR/ CM | DATA 78 | 5 |
| 79 | PR/OM | INITIAL TRAINING 79 | 5 |
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| 81 | | GOVERNMENT 81 | 4 |
| 8 2 | PR/ CM . | SYSTEM/PROGRAM MGT 82 | 5 |
| 83 | PR/CM | SYSTEM TRE 83 | 5 |
| 84 | PROC | LOGISTICS SUPPORT 84 | 5 |
| 8 5 | PR/ MC | OPERATIONAL SITE ACT 85 | 5 |
| 86 | PR/MC | TOOLING AND IND FAC 86 | 5 |
| 87 | PR/CM | DATA 87 | 5 |
| 8 8 | PR/ CM | INITIAL TRAINING 88 | 5 |
| 89 | PROC | OT HER . 89 | 5 |
| 90 | | RECURRING 90 | 5 3 |
| 91 | | CONTRACTOR 91 | 4 |
| 92 | PROC | MISSION HARDWARE PROD 92 | 5 |
| 93 | PR/ CM | INITIAL SFARES 93 | 5 |
| 94 | PROC | SUSTAINING ENGINEERING94 | 5 |
| 95 | PROC | ECP/ECO 95 | 5 |
| 96 | PR/CM | 1ST DEST TRANS/PKG 96 | 5 |
| 97 | PROC | SUST TOOL, TEST EGUIP 97 | 5 |
| 98 | PROC | RIP-OUT, INSTALL, INTEG 98 | 5 |
| 9 9 | PRO C | OT HER 99 | 5 |
| 100 | | GOVE RNMENT 103 | 4 |
| 101 | PRO C | MISSION HARDWAPE PFOC 101 | 5 |
| 10 2 | PR/CM | INITIAL SFARES 102 | 5 |
| 103 | PROC | SUSTAINING ENGINEERING103 | 5 5 5 5 5 5 4 5 5 5 5 5 5 5 5 |
| 104 | PROC - | ECP/ECO 104 | 5 |
| 105 | PR/OM | 1ST DEST TRANS/PKG 105 | 5 |
| 1 C 6 | PROC | SUST TOOL, TEST EQUIP 106 | 5 |
| 167 | PROC | RIP-OUT, INSTALL, INTEG 107 | 5 |
| 108 | PROC | OTHER 108 | 5 |

| AFFRO | C OD E | COST ELEMENT | | RCLLUP |
|-------------|--------|------------------------------|-------|------------------|
| 189 | | OPERATIONS AND SUPPORT PHASE | 109 | 1 |
| 113 | | CPERATIONS | 113 | 2 |
| 111 | | CONTRACTOR | 111 | 3 |
| 112 | OMN | CONSUMABLES | 112 | 4 |
| 113 | OMN | OTHER | 113 | 4 |
| 114 | | GOVERNMENT | 114 | 3 |
| 115 | OH/MF | ORGANIZATIONAL PERSONN | EL115 | 4 |
| 116 | OMN | EQUIPMENT LEASEHOLD | 116 | 4 |
| 117 | OM/MC | OPFRATIONAL FACILITIES | 117 | 4 |
| 118 | OMN | CONSUMABLES | 118 | 4 |
| 119 | O MN | OTHER | 119 | 4 |
| 124 | | LOGISTIC SUPPORT | 120 | 2 |
| 121 | | CONTRACTOR | 121 | 3 |
| 122 | OMN | SYSTEM ILS MANAGEMENT | 122 | 4 |
| 123 | OMN | SYS ENG, FIELD SERVICE | 123 | 4 |
| 124 | | SUPPLY | 124 | 4 |
| 125 | PR/OM | SPARE PARTS, REFAIR M | AT125 | 5 5 |
| 126 | OMN | TRANS AND PACKAGING | | 5 |
| 127 | OMN | DATA AND DOCUMENTATION | 127 | 4 |
| 12 8 | OMN | OTHER ILS | 126 | 4 |
| 129 | | GOVERNMENT | 129 | 3 |
| 130 | OMN | SYSTEM ILS MANAGEMENT | 130 | 4 |
| 131 | | MAINTENANCE | 131 | 4 |
| 132 | OM/MC | MAINTENANCE FACILITI | ES132 | 5 |
| 133 | OM/MP | MAINTENANCE PERSONNE | L 133 | 5 |
| 134 | OMN | SUPPORT EGUIP MAINT | 134 | 5 |
| 135 | OMN | SYS ENG. FIELD SERVICE | 135 | 4 |
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| 137 | OM/MF | SUPPLY PERSONNEL | 137 | 5 |
| 138 | OM/MC | SUPPLY FACILITIES | 138 | 5 5 5 5 |
| 139 | PR/ CM | SPARE PARTS, REPAIR M | AT139 | 5 |
| 140 | OMN | INVENTORY ADMIN | 140 | 5 |
| 14 1 | ONN | TRANS AND PACKAGING | 141 | 5 |
| 142 | OMN | DATA AND DOCUMENTATION | 142 | 4 |
| 143 | OMN | OTHER ILS | 143 | 4 |
| 144 | OMN | CCNTRACTOR - TRAINING | 144 | 2 2 |
| 145 | OMN | GCVERNMENT - TRAINING | 145 | 2 |
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| 147 | OMN | GCVEENMENT - OTHER | 147 | 2 |
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| ¥00 | 4 | ý | • | | ; | 10. | ; | | 2.5 | , | . | • > | | • | • | | | PAKAMETER # 2 (F = FACTOR) | | 11.6000 | 11.2000 | 10.000 | 0000.04 | 10.0000 | | 2-1606. | 5-31000F-02 | 000848 | .848.00 | .934000 | .934000 | 150.00 | • | 153,000 | •0 | نا. | 1.34003 | • |
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| OPERATED ON | 8 | | 4 | 15.5 | | | 3. | - | 5.6 | • | | | | 1.5 | ٠ | • | | PARAMETER # 1 (F = FACTOR) | | 20000000000000000000000000000000000000 | 5.03000 | 2.5000 | 5.0000 | 2,5001 | | 10000 | 20,00 | 1 00 0 4 4 1 | 90009 | 9.85000 | 4.23860EE-03 | 1.4000 | 5.000000E-02 | .60300 | 5.0000 | .12000 | 10.000 | .120000 |
| 13 | | | | | | | | | | | | | | | | | | CBS | | | | | | | | | | | | | 1 | | 920 | | 01 0 | | · co | 0 1 0 |
| A 404R | | | | 3.8 | | 10. | | | | | | | | | | : | | 7 O N | , | 18 | 7 9 | 18 | 12 | 99 9 | 75 | 7: | 1 0 | • | ٠. | 101 | 7 | 3 | | | £ 1 | | | 9 1 |
| FIRST | THROUGHPUT | | | 21- 30 | | | | | | | | 101-116 | | | | ı | CER INPUT | C CBS | • | ٥ | ‡ | 23 | 54 | 31 | 25. | ? (| 1 7 | ¥ | 9 | 11 | 96 | 95 | 63 | 101 | C 102 0 | 112 | 115 | 118 |

| SECOND | RACAR | 13 | OPERATED O | ED ON SHIP CLASSES | LASSES | нос | FFX 600. | 00-963 ACE | ZIPGUN | | | |
|---------------|------------|-----|------------|--------------------|------------|---------------|---------------------------------------|------------|---|-------------------------------|------|---------------|
| THROUGHPUT | 1 | | | | | | | | | | | |
| INDEX | - | | . 2 | m | | * | w | م | ~ | • | • | 10 |
| | | | | : | | • | 16. | • | 80. | 2,72 | 1.2 | 9. |
| 11- 21- 30 | 3.04 | * | 3.2 | 16. | | | 8. 8 2. 92 | 1.06 | 2.04 | • | • 96 | 5.6 |
| | | | l | 2.4 | | | 1.2 | • | , | | | • |
| | . · | | | | ω. | • ° | 1 + Q | • | • | | •0 | • |
| | | 9 | *** | • | | 746 | | 90. | 49. | 80. | 2 | |
| | | | | 6 | 48 | 2• | | 9. | • | 3.36 | 7.64 | 3.2 |
| | 0 | | • | •69• | o r | ٠. | æ. | | 1.2 | • 96 | 1.6 | |
| | • | | | | | ٠. | 1.6 | 1.92 | 1.28 | 4.16 | • | |
| 101- 110 | a | | | • | | 1.6 | 78 | • 20 | 16.64 | ٠. | • | |
| | 5 | | | ż | | | | • | *** | • | • | |
| | 9 | | ٠ | . | 1.04 | , | • • | • | 71. | , c | • | 30.0 |
| | | | 5.76 | * | 10 | • | 2.56 | • | ¥ (| 99 • 7 | • | * D * T |
| | • | | • | • | | | ; | • | • | | | |
| CER INFUT | ⊢ ! | | | | | | | | | | | |
| CBS | CER S | CBS | PARAME | ARAMETER # 1 | 4 4 | PARAMETER # 2 | PARAMETER # 3 | ER # 3 | FARAMETER 6 4 | PAKAMETER # 5 (F = FACTOR) | 6 20 | PARAMETER # 6 |
| Š | | 786 | : | - | - | 2 | = | | | | | |
| 9 0 | 18 | 0 | 5.000 | 00 CE-02 | å | | 0 | | • 0 | ٥. | | ġ. |
| ~ | 19 | 9 | 5,000 | 10008-32 | | 11.2000 | 000338. | 00 | 12.0000 | : | | • |
| 23 | 18 | | 2,500 | 100 SE-92 | | 0.000 | .6113 | 90 | 66.000 | ٤. | | • |
| 54 | 12 | | 000.4 | 100 CE -02 | | 0000 | 1,00 | 00 | 1. 60.63 | å | | • |
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| r u | 4 | | |) (c | | At 8 a Do | | ; | • 0 | | | |
| 2 4 | • - | | 148000 | 200 | | 84.8003 | 8 | | 5 | | | • |
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| 96 | 10 | | 4.200 | 100 0E-03 | • | .747000 | 1.14003 | 02 | 2.10000 | 000074. | | • |
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| 93 | • | | 5.030 | 5.03000 CE-02 | ٥ | • | • | | • | • | | • |
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| C 102 G | | 101 | 5.000 | 5.000 CO 0E-02 | • | | • | | • • | • • | | • |
| 115 | | | 12000 | 200 | - | U | 9 6 | 661300 | - C - C - C - C - C - C - C - C - C - C | • > c | | • · |
| C 115 0 | 15 | ے د | 10.000 | 000 | | 1.00000 | 3. U LO U U U E - U Z | 50E-06 | 15 4 4 4 | • | | • : |
| 118 | | 101 | .16 | 305 | • | | • | | • | • | | • |

| | | MISSI | SSILE IS | OPERATED ON | SHIP CLASSES | Э ОН | FFX 00-963 4 | ACE BOOMER | | |
|-----|------------|-------|----------|---------------------|------------------------|-------------------------------|----------------|---------------|-------------------------------|---|
| Ŧ | THROUGHFUT | FUT | | | | | | | | |
| _ | NOEX | 1 | | ~ | m | 4 | 9 | ~ | 6 | 10 |
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| Ŧ | 71 | 50 .2 | ~ | ۴. | 2* | | • 92 | m• | | |
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| | KOK | NO N | XREF | FAKAMETE (F = FA | METER # 1 = FACTOR) | FARANEIEK * 2 (F = FACTOR) | (F = FACTOR) | FARAMETER 6 4 | FANAMETER # 5 (F = FACTOR) | (F = FACTOR) |
| | | - | 0 | 7.30000 | CE-05 | 9.79000 | 000076. | 310 | 0000 | • |
| | | | C | F 1.0000 | | 1.00000 | .756003 | 00 | 3400 | • |
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ZIPGUN BOOMER

| | EQUIFMENT ELEMENTS | MENTS PER SHIP | |
|------------|---------------------------|-------------------------|--|
| SHIP CLASS | EQUIPMENT ELEMENT | CPERATIONAL GUANTITY | INVESTMENT |
| HOC | FIFST SECOND HISSIL | 2 S G | 1.00 1.00 20.03 |
| ir X | FIHST SECOND MISSIL | 1 2 20 | 1.00 0.00 2.00 |
| 896-00 | FIFST SECOND MISSIL | 2 2 2 1 | 11 11 11 11 11 11 11 11 11 11 11 11 11 |
| AOE | FIFST SECOND MISSIL | 2077 | 1.00 1.00 10.00 |
| ZIPGUN | F1FST SECONE | ± æ | 1.00 |
| B COME R | FIRST | t 0 | 1.00 |

SLCCM TESTCASE DATA LISTING OF THE 11 COST ELEMENTS INCLUDED IN FLYAMAY COSTS

| SLCCM TESTCASF DATA | DATA | | | | EVALUATION | N OF CER | EVALUATION OF CERS AND FACTORS FCR | ORS FCR | FIRST | RADAR | | | | | | 00.07.10. |
|------------------------|-----------|--------------------------|----------|----------|------------|----------------|------------------------------------|----------|-----------|-----------|---------------|--------|--------|--------|--------|-----------|
| ROW CER | TEMP | σ . | 2 | e d | . . | e. | 9 | SUBEL1 : | SUBEL 2 | SUBEL 3 S | SUBEL4 S | SUBELS | SUBEL6 | SUBEL7 | SUBELO | FACTOR |
| C 6018 | | 56.250 5.00E-02 | 11. | 1.0 | 9.5 | ; | ė | 0.0 | 6.0 | . o | 6.9 | ? | 0.0 | 0.0 | 56.3 | 0.0 |
| C 14018 | 135.000 | C 14018 135.000 5.03E-02 | 11. | 1.0 | 12. | • 0 | • 0 | 0.0 | G • , | • | 0.3 | 0.0 | 0.0 | 0.0 | 135.0 | 0.0 |
| C 23018 | 401+000 | C 23018 401.000 2.50E-02 | 10. | 1. 0 | 43. | . | • | 0.0 | | 0• 3 | 0•3 | 0.0 | 0 • 0 | 0.0 | 401.0 | 0.0 |
| C 24012 | 2.000 | 2.000 5.00E-02 | • 0 • | 1.0 | 1.0 | •0 | • | 0.0 | 9 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 2 • 0 | 6.0 |
| C 31018 | 2 80.5 80 | 2.50E-02 | 10. | 1.0 | -02 | • | • | 9.0 | • | 6. | 3.1 | 0.0 | 0.0 | 0.0 | 200.5 | 0.0 |
| C 32012 | 1.000 | 5.00£-02 26. | 26. | 1.0 | 1.0 | 3. | • 0 | 0:0 | • | 0.0 | 6.3 | 3 | 9 | 0: | 1.1 | 0.0 |
| C 40012 | 5.000 | 100 | 5.00F-02 | 1.0 | 1.0 | • 0 | • | 0.0 | G • 3 | 0. 3 | ٠ • | | 0.0 | 0.0 | 5.0 | 0.0 |
| C 42012 | 30,000 | 1.5 | 2.0 | 10. | 1.0 | ٥. | • | 0.0 | ·; | 0.3 | 0.0 | 0.0 | 3 • 0 | 0.0 | 33 • 6 | 0.0 |
| C 49012 | 2.500 | 50. | 5.00E-02 | 1.0 | 1.0 | • | • | J. 0 | 6.3 | 3 | 0:3 | 9.0 | 0.0 | 0.0 | 2 • 5 | 0.0 |
| C 580 1 | 9.866 | 1.4 | . 85 | • | •• | • _D | • | 0.0 | ?• | 0.0 | 0.3 | 0.0 | 9 | 0.0 | 6•6 | 0.0 |
| C 640 1 | 4.226 | .68 | • 85 | • | · 0 | • • | • • | 9.0 | £.•3 | 0.0 | ن ون ون | 0.0 | o • | 0.0 | 4.2 | 0.0 |
| C 77010 | .013 | 9.80E-03 | . 63 | 1.1 | 2.1 | ; | ŋ. | 9.6 | ; | | (•) | 9 | | 0.0 | • | 0.0 |
| C 86010 | .005 | 4.23E-03 .93 | . 93 | 1.1 | 2.1 | 44. | • 0 | 0.0 | 9 | 0.0 | ن • ن | . 0 | 3 • 6 | 0 • 0 | • | 0.0 |
| C 920 4 | 5,516 | 1.4 | 1.50E+02 | .85 | •0 | • • | • | 0.0 | • | es 5 | 0 • 0 | 3.0 | 0.0 | 0.0 | 5 • 5 | 0.0 |
| C 930 8 | .276 | .276 5.00E-02 0. | • 0 | • 0 | | ; | : | 0.0 | ?; | 9 | ٤٠, | 3.0 | 0.0 | 0.0 | F? | 0.0 |
| C1010 4 | 2, 364 | . 60 | 1.50E+32 | • 85 | • | • 0 | • | 0 • 0 | 0 • 0 | • | 9. | 0.0 | 9.0 | 0.0 | 2.4 | 0.0 |
| C1020 8 | .118 | 5.0JE-32 9. | •6 | • | • | • | • | 0.0 | 0.0 | • | 6.9 | 0.0 | 0.0 | 0.0 | • | 0 |
| C1120 0 | .662 | .12 | • | • | • | ئ | • | 0 • 0 | 0.0 | • | 9. | 0.0 | | 9 | | 0.0 |
| C115012 | 45.306 | 10. | 1.0 | 3.006-32 | 1.5 0E+02 | | • | 0.0 | ຄ • ໊ | • | 0.0 | 0.0 | 0.0 | 0.0 | 45.0 | 0.0 |
| C1180 8 | . 284 | - 12 | • | • | • | • | • 0 | 0.0 | L. J | | 0.3 | 0.0 | 9 | : | | : |

| | | | EVALUATION | N OF CEFS | AND FACTORS FOR | RS FOR | SECOND | R AD AR | | | | | 0.0 | 08/01/79 |
|--|-------------|------------|------------|-----------|-----------------|-----------|---------|---------|----------|--------|---------------|---------|--------|----------|
| 2 4 | | m) | 4 | 2 | 9 | Suefit \$ | SUBEL 2 | SUBEL 3 | SUBEL4 | SUFELS | SUBEL6 SUBEL7 | SUBEL 7 | SUBELB | FACTOR |
| 3. C. | ċ | | ÷ | | 0. | 0.0 | ਰ ਹ | 9:3 | 9. | 0.0 | 0.0 | : | 0.0 | 0.0 |
| 1184 | | 9 | 12. | ; | •• | 0.0 | • | 0.0 | 0.0 | e•0 | 0.0 | 9.0 | 100.1 | 0.0 |
| 1080 | . 80 | | • 0 • | • , | 0. | 0.0 | 0°0 | • | 0.0 | 0 | 0.0 | 0.0 | 321.0 | 0.0 |
| 1.0 | 1.0 | | 1.0 | • • | | 0.0 | · , | 9 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 |
| 1080 | | | 20. | • | , , | 0.0 | 6. | • | 3 | 0.0 | ů. C | 0.0 | 160.5 | 0.0 |
| 20. 1.0 | 1. 0 | | 1.0 | • | • 0 | 0.0 | r• 3 | 0.0 | 0.) | 0.0 | 0.0 | | • | 0.0 |
| 5.50E-02 1.0 | 1.0 | | 1.0 | .; | • | 0.0 | 3 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | • | 0.0 |
| 1.6 10. | 10. | | 1.0 | •, | •0 | 0.0 | 6.9 | 9 | C• 3 | 0.0 | 0.0 | 0.0 | 24.0 | 0.0 |
| 5.30E-32 1.U | 1 | | 1.0 | • | .0 | 0.0 | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 |
| .85 | • | | • 0 | • ນ | • 0 | 0.0 | : | 9 | ů. | 0.0 | 0.0 | 0.0 | 7.9 | 0.0 |
| .85 v. | • | | • | ڻ• ر | • | 0.0 | • | 0 • 0 | G • 3 | 0 | 0.0 | 0.0 | 3.6 | 9.0 |
| .75 1.1 | 1:1 | | 2.1 | 77. | • | 0.0 | 6.3 | C • 3 | 0.0 | 9.0 | 0.0 | 0.0 | • | 0.0 |
| .75 1.1 | 1.1 | | 2.1 | 77. | • 0 | 0.0 | · . | 0 | 0.0 | 0.0 | Ú. Û | 0.0 | • | 0.0 |
| 1.50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | - 85 | | • | | •0 | 0.0 | 0.0 | 0.0 | . | 0.0 | 0.0 | 0.0 | * | 0.0 |
| .0 | • | | • 0 | • | •0 | 0.0 | ; | 0.0 | 6.0 | 3. | 9 | : | ~ | 0.0 |
| 1.50.+02 .85 | . 65 | | .0 | ; | • | 5.3 | Ç., | 0.0 | 0 • 0 | 0 • 0 | 9 | 0.0 | 1.9 | 0 • 0 |
| ٠,٠ | ÷ | | 3. | • د | • 3 | 0.0 | ? | | J•C | 0.0 | 0.0 | 0.0 | 7. | 0.0 |
| .0 | | | • | • c: | : | 0.0 | : | . 0 | 0.0 | 0.0 | 0.0 | 0.0 | e. | 0.0 |
| 1.0 3.6 ut-02 | 3. i ut - (| 2 | 1.50c+02 | .5 | • 0 | 3.6 | 7. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45.0 | 0.0 |
| 9. | • | | • | • 0 | • | 3.0 | • , | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 |

| SLCCM Testcase Data | DATA | | | | EVALUATIO | N OF CER | EVALUATION OF CERS ANC FACTORS FCR | CTORS FCR | | MISSILE | mi | | | | 9 0 | . 67.16. |
|------------------------|-------------------|-----------------|-------------------|----------|------------|----------|------------------------------------|-----------|---------------|---------|----------------------|--------|-----|----------------------|------------|----------|
| ROW CER | TEMP | 4 | P 2 | m | . . | g. | <u>ه</u> | SUBELI | SLBEL1 SUBEL2 | | SUBEL3 SUBEL4 SUBEL5 | SUBELS | | SUBEL6 SUBEL7 SUBEL8 | SUBELB | FACTOR |
| F 1010 | .047 | 7.30 E-85 | 8.6 | .97 | 70. | 1.8 | • | 0.0 | 9 • 6 | • | 0.0 | 0.0 | 0.0 | • | 0.0 | • |
| F 20 3 | . 200 | 4.67E-82 | 1.0 | .77 | 5.08E+32 | 23 | | | | | 9 | 0.0 | 0.3 | 0.0 | • | |
| F 3010 | 35,529 | 6.60E-02 3.00E+ | 3.006+04 | .61 | 1.0 | 1.0 | • | 0.0 | 0.0 | 0 • 0 | : | 0.0 | 0.0 | 0.0 | 9.0 | 35.5 |
| F 07 | 161,528 | 36. | 1.1 | . 65 | 1.00E+03 | 15 | : | •: | 3.0 | | 9 | 0.0 | 0.0 | 1.0 | 1.0 | 101.5 |
| F 5010 | 0.0 | • 20 | 1.00F+03 | 23 | 1.0 | 1.0 | : | 0.0 | 0.0 | 0.0 | 9 | 0.0 | 9 | * | 9.4 | • |
| C 6018 | 28, 250 | 5.00 E-02 | 11. | .50 | 9.0 | • | • | 0.0 | | 0.0 | 0: | 9 | | 3 | 26.3 | : |
| C 14818 | 67.880 | 5.08 E-02 | 11. | .50 | 12. | • | • | 0.0 | 3.0 | • | 0.0 | 0.0 | 0.0 | 0:0 | 67.8 | 0.0 |
| C 23118 | 4.833 | 9.008-02 | 6•6 | 3.97E-02 | 10. | • | • | ; | 9. | 0.0 | 0.0 | 0.0 | 0.0 | : | 4.6 | 0.0 |
| 23218 | C 23218 1847, 929 | 4.00E-02 | 5.2 | 36. | 10. | • | • | 4.8 16 | 1647.9 | 0.0 | | • | 6.3 | : | 1852.8 | 0.0 |
| C 24012 | 1.009 | 2.50E-02 | .0, | 1.0 | 1.0 | • | • | 0.0 | 0 ° C | 0.0 | 0.0 | 0.0 | 0.0 | 0:0 | 1.0 | 9.0 |
| C 31018 | 100.500 | 2.506-02 | 10. | .5 (| -02 | • | • | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 100 • 5 | • |
| C 32012 | . 500 | 2.50E-02 | 20. | 1.0 | 1.0 | • | : | 0.0 | 3 | 0.0 | 9 | 0.0 | 9 | : | 10 | |
| C 40012 | 2.500 | 50. | 5.00E-02 | 1.0 | 1.0 | • 0 | • | 0.0 | c. | 0.0 | 3 | 0.0 | 0.0 | 3 | 2.5 | 0.0 |
| C \$2012 | 15.000 | 1.5 | 1.0 | 10. | 1.0 | 0. | • | 0 • 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.0 | 9:0 |
| C 49012 | 1- 256 | .55 | 5.00E-02 | 1.0 | 1.0 | 3• | • | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 9.0 | 0.0 | 1.3 | 0.0 |
| C 580 1 | 34.761 | . 70 | • 85 | • | • | •0 | • | 0.0 | 0 • 0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 34 . 8 | 0.0 |
| C 640 1 | 14.698 | • 30 | . 85 | • | | • 0 | • | 0.0 | 0.0 | 0 • 0 | 0: | 0.0 | 0.0 | 0:0 | 14.9 | : |
| C 77818 | .006 | 9.805-03 | 74. | 1.1 | 2.1 | *** | • | 0 • 0 | 0.0 | | 0.0 | 6.0 | 0.0 | 0.0 | • | 0.0 |
| C 86010 | • 005 | 4.20E-03 | . 47 | 1.1 | 2.1 | ** | . | 0.0 | J. i | 0.0 | 0.0 | 0:0 | 0.0 | 0.0 | • | 0.0 |
| C 921 4 | 4.48 | • 20 | 1.50E+02 | .77 | : | •0 | • | 3 | 2.5 | 9.0 | 6.0 | 0:0 | 0.0 | 9: | * | : |
| C 922 4 | 3536, 273 | 1.026+02 | 1.02E+02 3.00E+02 | .85 | • | •0 | • | 4.4 3 | 3536. 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 3540.7 | 0.0 |
| 93015 | C 93015 3236.790 | 91. | 3.976-02 | 36. | •0 | • 0 | • | 0.0 | Ç. • ij | 0.0 | G.0 | 9.0 | 0.0 | 0.0 | 0.0 3236.8 | 0.0 |
| C1010 4 | 11. 391 | • 30 | 1.50E+02 | . 65 | • | • | | 0.0 | 3.0 | | 0.0 | 0.0 | • | - | 11.4 | : |
| C1020 8 | .570 | 5.00E-02 | : | • | • | • 0 | • | 0.0 | 9 | 0.0 | 6.3 | 0.0 | 0.0 | 0:0 | 9 | 9 |
| C1120 8 | 424. 887 | • 12 | • | • | : | ŗ. | • | 0.0 | .2 | • | 6.9 | 3.0 | 0.0 | 0.0 | 454.9 | : |
| C115012 | 90.06 | 10. | 0.5 | 3.006-02 | 1.50E+32 | • | | 0.0 | 9.0 | 9 | 1.9 | 0.0 | 0.0 | • | 96.0 | 0.0 |
| C1180 8 | 1,367 | • 12 | • | • | • | • 0 | • | 0.0 | 0 • 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 |
| C1391 0 | 1.112 | ю. | | •0 | | • 0 | • | 1.1 | 3.0 | 0.0 | | 9.0 | 9.0 | 5.0 | 3.1 | : |
| 1392 6 | C1392 8 1768.137 | • 50 | : | • | • | • | : | 1.1 | 1.1 1768.1 | 0.0 | 0.3 | 0.0 | 0.0 | 2.0 | 2.0 1771.2 | : |

SLCCH TESTCASE DATA

EQUIPHENT ELEMENT LIFE CYCLE COSTS

10 SHIP FLEET SUMMARY
R O T & E PHASE
(FYT9 \$H)

| TOTAL | ***** | 3675.27 | 550.87 | 163.95 | 0 ₽•9 | 00.07 | 84.58 | 20 • 00 | 0.9 | 3.00 | 2.85 | 366.92 | 00.0 | 00.04 | 310.92 | 22.00 | 2.00 | 2.00 | 2.00 | 31.24.40 | 26 33 . 24 | 7.68 | 31.00 | 25 74 . 76 | 19.4 | 4.30 | 2.70 | 5.24 | 491.28 | 2.40 | 14.00 | 461.50 | 2,30 | 6.01 | 2.00 | 3.00 |
|----------------|-------|-------------|------------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|----------|-------------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------|------------|------------------------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|----------|-------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|
| MISSIFE | | 2076.05 | 113,13 | 37.73 | 1.00 | 00*4 | 28.25 | 2,00 | ₽9. | 30. | 1.50 | 75.40 | 08. | 00.7 | b7.80 | 2.20 | .20 | .20 | •20 | 1962.92 | 1659.16 | •76 | 3.10 | 1852.76 | 1.00 | .73 | .27 | •56 | 103.74 | • 2 • | 1.40 | 100,50 | 9.50 | 99. | • 20 | .30 |
| SECOND | | 684.22 | 167.84 | 29.32 | 980 | 16.00 | 3.04 | 8.00 | 2.72 | 1.28 | • 60 | 138.52 | 3.20 | 16.04 | 108.12 | 8.80 | 00. | 98. | 98. | 516.38 | 344.12 | 3.04 | 12,40 | 321.00 | 1.60 | 2.92 | 1.08 | 2.08 | 172.26 | 96* | 5.60 | 160.50 | 98. | 2 • 40 | 28. | 1.28 |
| FIRST RADAR | | 915,30 | 26 9 90 | 96 • 50 | 5, 10 | 20.00 | 56.25 | 14.30 | 3.40 | 1.50 | 67. | 17 2,00 | 0.04 | 20.30 | 135.10 | 11,00 | 4.00 | 1.00 | 1,00 | 645.10 | 429.90 | 3.80 | 15,50 | 40 1. 00 | 2,30 | 3,65 | 1,35 | 2. 60 | 215,20 | 1.20 | 2.00 | 200 - 50 | 1.30 | 3,00 | 1.00 | 1.51 |
| COST ELEMENT | | ROTLE PHASE | VALIDATION | CONTRACTOR | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | | OTHER | FULL SCALE DEVELOPMENT | | SYS/PROG/LOG SLPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | GOVERNMENT | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER |
| ROW | : | - | ~ | ניין | | ĸ | • | ~ | • | 6 | - | = | 12 | 13 | * | 15 | 16 | 17 | 91 | 19 | 32 | 2.1 | 22 | 23 | 5 | 52 | % | 23 | 28 | 53 | 33 | 31 | 32 | 33 | 34 | 35 |
| APPRO | ***** | | | | D/0H | OTE | 11E | W. | /#C | <u> </u> | 1 11 | | 9 | 7. | 3 | OTE | ۲ ج | TE | T E | | | HO/ | ITE | JTE | TE. | /HC | OTE | JE | | #0. | TE. | JE. | īĒ | | OTE | TE |

SLCCM TESTCASE DATA

| TOTAL | • | 7272.65 | 276.03 | 188,25 | 140.50 | 11.50 | 20.00 | 69.00 | 00.4 | 20.00 | 00.4 | 2.00 | 10.00 | 47.75 | 5.75 | 20.00 | 2.00 | 00.9 | 2 • 0 0 | 00.00 | 00.4 | 87.83 | 61.32 | 52.52 | 2.00 | • 20 | 6.40 | . 20 | 26.51 | 22.51 | 2.00 | .20 | 1,60 | • 20 | 42.47 |
|-----------------|---|------------------|--------|--------|------------|--------------------|--------------------|------------|------------------|---------------------|-------|--------------------|--------|------------|--------------------|------------|--|---------------------|---------|------------------|-------|------------|------------|-----------------------|----------|--------------------|--------------------------|-------|------------|-----------------------|------------|--------------------|--------------------------|-------|---------------------|
| MISSIFE | | 6 511 . 0 4 | 79.89 | 28.95 | 23.50 | 2.54 | 2.00 | 15.00 | 37. | 2.00 | 0.7 | • 20 | 1.30 | 5.45 | 1,25 | 2.00 | • 20 | 09• | • 20 | .30 | 07. | 53.94 | 35.64 | 34.76 | • 20 | -02 | 49* | • 0.2 | 15.30 | 14.90 | .20 | 50. | • 16 | - 92 | 35.65 |
| SECOND RACAR | | 163.72 | 87.20 | 780 | 52.00 | 0 9 • 4 | 8.00 | 24.06 | 1.60 | 6.00 | 1.60 | 08• | 4• 00 | 15.80 | 2.30 | F• 00 | 08. | 2.40 | . 80 | 3.20 | 1.60 | 16.40 | 11041 | 7.89 | .80 | • 0.8 | 2.56 | | 95.*7 | 36.38 | 0.80 | • 3.8 | 49. | 8° - | 3.03 |
| FIRST RADAR | | 200° 30 | 168.39 | 0.50 | 0.00 | 00.8 | 16.00 | 30,30 | 2.06 | 16.30 | 2.10 | 00 • ** | J. • 6 | 23.56 | 2,58 | 10.30 | ा अ • • • • • • • • • • • • • • • • • • • | 25 | 30.01 | 37.04 | 2. 10 | 20.49 | 14.27 | 5.87 | 10.10 | • 10 | 3.20 | • 10 | 6,23 | 4.23 | 1.00 | • 10 | 0.0 | +10 | 7.70 |
| COST ELEMENT | | INVESTMENT PHASE | Ξ | | CONTRACTOR | SYSTEM/PROCRAM HGT | ADV PRODUCTION ENG | SYSTEM TRE | LCGISTIC SUPPORT | TCOLING AND IND FAC | CATA | INITIAL TRAINING | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEM TSE | LOGISTIC SUPPORT | TCOLING AND IND FAC | DATA | INITIAL TRAINING | OTHER | RECURPING | CONTRACTOR | MISSION HAFDHARE PROD | E CP/ECO | 1ST DEST TRANS/PKG | R IP-OUT, INSTALL, INTEG | 01HER | GOVERNMENT | MISSION HARDWARE PROC | 5 CP / ECO | 1ST DEST TFANS/PKG | 2 IF-OUT, INSTALL, INTEG | OTHER | FOOD > 414> 14 F121 |
| ROM | 1 | 36 | 37 | 36 | 33 | 4 | 7 | 45 | M) | t | 45 | 46 | 7 | Œ, | \$ | ις ι | 51 | 25 | 53 | 54 | 55 | 2 € | 23 | 5.8 | 59 | 9 | 61 | 29 | 6.3 | 79 | 5.5 | 99 | 29 | 9 | |
| APPRO | | | | | | PR/CH | PROC | PR/CH | PROC | PR/MC | PR/OH | P.R./ OH | PROC | | PR/OM | PR/CH | PROC | PR/MC | PR/CH | PR/CH | PROC | | | P-20C | PROC | P3/0H | PROC | PROC | | PROC | PROC | PR/CM | PROC | PROC | |

EQUIPHENT ELEMENT LIFE CYCLE CASTS
10 SHIP FLEET SUPMARY
FULL FRODUCTION PHASE
(FY79 SM)

| TOTAL | 6996.57 | 87.76 | 67.83 | 11.20 | 24.60 | 5.06 | 2.00 | 2,00 | m o • | 0.40 | 6.60 | 00.0 | 19.93 | 00.4 | 1.72 | 2 • 0 0 | 2 • 8 8 | •01 | 30°E | 2.48 | 90.4 | 6908.81 | 68 31 . 84 | 35 54 • 65 | 3237.29 | 2.00 | 00.4 | 15.32 | 10,18 | 10.60 | 2.00 | 76.98 | 15.65 | 94. | 2.00 | :; | 6.59 | 4.36 | 41.58 | 2.00 |
|----------------|-----------------|--------------|------------|--------------------|------------------------|------------|-------------------|----------------------|---------------------|-------|------------------|-------|------------|--------------------|------------|--------------------|----------------------|---------------------|-------|------------------|-------|-----------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------------------------|-------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------|-------|
| HISSILE | 6 € 31 • 15 | 8.7.8 | 6.79 | 1.12 | 2.46 | •50 | •20 | • 20 | .01 | 48. | •66 | 09. | 1.95 | 87. | •17 | .20 | .20 | 90. | .36 | .24 | 07. | 6622.37 | 6797.65 | 3540.72 | 3236.79 | •20 | 07. | 11.00 | 7.30 | 1.04 | .20 | 24.72 | 11.39 | .51 | • 20 | 97. | 0.4 | 3,10 | 4.16 | • 20 |
| SECOND | 73.52 | 35.10 | 27.13 | 01.1 | 40 ° 0 | 2.00 | 09. | 08. | .01 | 3.36 | 2.64 | 3,20 | 7.57 | 1.92 | 69• | 09. | .80 | 07. | 14 20 | . 96 | 1.60 | 38.42 | 15.19 | 4.41 | • 22 | 0.8. | 1.60 | 1.92 | 1.28 | 4.16 | 99. | 23.23 | 1.89 | წ ე• | 00. | 1.68 | *8* | • 556 | 16.64 | 08. |
| FIRST RADAR | 91.90 | 43.86 | 33.91 | 5.60 | 12.30 | 2.50 | 1. 16 | 1.00 | • 01 | 4.20 | 3.36 | 4.30 | 4.97 | 2.40 | • 86 | 1.00 | 1.30 | • 01 | 1.50 | 1.20 | 2.00 | 48.32 | 18.99 | 5.52 | • 28 | 1.00 | 0 ° 2 | 2 • 40 | 1.60 | 5.20 | 1, 30 | 29.03 | 2.36 | • 12 | 1.0 | 2.10 | 1.35 | 0.4.0 | 20.80 | 1.00 |
| COST ELEMENT | FULL PRODUCTION | NONFECURRING | CONTRACTOR | SYSTEM/PROGRAM MGT | PRODUCTION ENGINEERING | SYSTEM TRE | LCGISTICS SUPPORT | OFERATIONAL SITE ACT | TCOLING AND IND FAC | | INITIAL TRAIPING | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEM TRE | L CGISTICS SUPPORT | OPERATIONAL SITE ACT | TCOLING AND IND FAC | DATA | INITIAL TRAIDING | OTHER | RECURRING | CONTRACTOR | MISSION PARDIANE PROD | INITIAL SPARES | SUSTAINING ENGINEERING | ECF/ECO | 1ST DEST TRANS/PKG | SUST TCOL, TEST EQUIF | AIP-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION HAFDWARE PROC | INITIAL SPARES | SUSTAINING ENGINEERING | ECP/FC0 | 1ST DEST TRANS/PKG | SUST TOOL, TEST EQUIP | | OTHER |
| M 04 | 69 | 7 0 | 7.1 | 72 | 7.3 | * | 75 | 76 | 7.7 | 7.6 | 79 | 80 | 81 | 82 | 83 | 8 | 85 | 96 | 87 | 99 | 60 | 90 | 91 | 35 | 93 | 36 | 95 | 96 | 46 | 96 | 66 | 130 | 111 | 102 | 193 | 104 | 135 | 106 | 137 | 108 |
| APPRO | | | | PR/OH | PROC | PR/0H | PROC | PR/HC | PR/HC | PR/OH | PRICH | PROC | | PR, OM | PR/OH | PROC | PR/HC | PR/HC | PR/0H | PR/OH | PROC | | | PROC | PR/OH | PROC | PROC | P8/0H | P. C. | PROC | PROC | | PROC | PR/CH | PROC | PROC | PR/OM | 800 | PROC | PROC |

The state of the s

EQUIPMENT ELCHENT LIFE CYCLE COSTS
10 SHIP FLEET SUMMARY
OPERATION & SUPPORT FLASE
(FY79 \$H)

| į | | FIRST | SECOND | 1 1 1 COL 1 | 17.01 |
|-----|------------------------------|--|---------|-------------|--|
| | COST ELEMENT | RADAR | R D D D | #1551LE | 1 01 AL |
| | | | | | |
| 139 | OPERATIONS AND SUPFORT PHASE | 141.55 | 115.34 | 2305.52 | 2562.18 |
| 110 | OPERATIONS | 73,95 | 50.96 | 522,75 | 657.66 |
| 111 | CONTRACTOR | 5,66 | £.03 | 425.89 | 4 36 • 0 8 |
| 112 | CONSTRABLES | 9 | 203 | 424.89 | 4 26 • 0 8 |
| 113 | , | 5.00 | 0.4 | 1,00 | 10.80 |
| 7 | COVERNERS | 68.28 | 56.43 | 96.87 | 221.58 |
| 115 | ORGANIZATIONAL PERSONNEL | (C) (E) (E) (F) (F) (F) (F) (F) (F) (F) (F) (F) (F | 20°04 | 94.30 | 160.00 |
| 116 | | 10,00 | 00.00 | 2,00 | 20.00 |
| 117 | OPERATIONAL FACILITIES | 0 e | 0.5 . 5 | 1.56 | 96.9 |
| 118 | CONSUMABLES | . 28 | . 23 | 1.37 | 1.00 |
| 119 | OTHER | 10,10 | 9.8 | 2,00 | 12.80 |
| 120 | LOGISTIC SUPPORT | 00 0 9 | 46.00 | 1781,25 | 1689.25 |
| | CONTRACTOR | 16.20 | 12,96 | 3.24 | 32.48 |
| 122 | SYSTEM ILS MANAGEMENT | 4 | 1.20 | - P | 00.00 |
| | 1 | 1.30 | 40.04 | . 2 E | 2.60 |
| | | 11.00 | 00 | 2,20 | 22 - 00 |
| 125 | SPARE PARTS, REPAIR MAT | 000 | 0.00 | 2,00 | 20 • 00 |
| | | 10.00 | 38. | 0.2.0 | 2.00 |
| 127 | DATA AND DOCUMENTATION | 1.40 | 1, 12 | .28 | 2.60 |
| | OTHER ILS | 1.00 | 99. | • 20 | 2.00 |
| 129 | GOVERNMENT | 43.80 | 35.04 | 1778.01 | 1856.85 |
| 130 | SYSTEM ILS MANAGEMENT | 4 • 30 | 3, 20 | 08• | 00.0 |
| | MAINTENANCE | 14.20 | 11.36 | 2.84 | 28.40 |
| | | 7.20 | 5.76 | 1.44 | 14.40 |
| 133 | MAINTENANCE PERSONNEL | 6.30 | 98.7 | 1.20 | 12.00 |
| | SUPPORT EQUIF MAINT | 1.00 | 0.8 | • 20 | 2.00 |
| 135 | SYS ENG, FIELD SERVICE | 3.20 | 2,56 | , 64 | 04.9 |
| 136 | SUPFLY | 19.90 | 15.92 | 1773,23 | 1619.05 |
| 137 | SUPPLY PERSONNEL | 0C *P | 2.40 | 09* | 00*9 |
| | SUPPLY FACILITIES | 3.60 | 2,88 | •72 | 7.20 |
| 139 | SPARE PARTS, REPAIR MAT | 10.90 | 8.30 | 1771,25 | 17 89.25 |
| 140 | INVENTORY ADPIN | 2 • 30 | 1,84 | | 4.68 |
| 141 | TRANS AND FACKAGING | 1.)0 | 00. | • 20 | 2.00 |
| 241 | DATA AND DOCLMENTATION | 1.50 | 1, 20 | •30 | 3.00 |
| 143 | OTHER ILS | 1.0 | 0.00 | • 20 | 2.00 |
| | CONTRACTOR - TRAINING | 0.30 | 00.0 | 93.3 | 00.0 |
| | GOVERNMENT - TRAINING | 4.60 | 3,68 | •92 | 9.20 |
| | CCNTRACTOR - OTHER | 1.50 | 1,20 | • 30 | 3.60 |
| 147 | • | 1.50 | 1, 20 | .30 | 3.00 |
| | ** | | | | 11 11 11 11 11 11 11 11 11 11 11 11 11 |

FOOTNOTE 1

FCCTNOTE 2

C-25

HOC SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT LIFE CYCLE COSTS - 10 SHIF FLEET R D 1 & E PPASE (FYT9 \$M)

| 4 10 | 1 | 575.13 | 17.99 | 20.17 | 62. | 04.4 | 11.28 | 2.20 | | . P7 | | 46.23 | 800 | 4 4 | 37.87 | 2042 | . 22. | 200 | 1 6 6 | E . B. B. S. | 42.54 | 40.0 | e e e | 442.75 | 45 | 100 | • 30 | 100 | 59.48 | •26 | 1.54 | 56.20 | .26 | 99 | • 22 | .33 |
|---|---|--------|------------|--|---|-------------------|-------------------|--------------------|--|-------|------|--------------------|------|-------|------------------|--------------------------|-------|------|-------------------------|--------------|------------------------|---|-------------------|--------------------------|---------------------|------|-------|----------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|-----|
| T N N N N N N N N N N N N N N N N N N N | | 415,21 | 22,63 | 7.55 | • 50 | 08. | 5,65 | 04. | . 14 | •0€ | 3.0 | 15.08 | •16 | 98. | 13.56 | 74. | 40. | 70. | 40. | 392.58 | 371.84 | 51. | •62 | 37.3.55 | .24 | • 15 | • 0 5 | | 20.75 | in ⇔ • | • 28 | 29.10 | .10 | •12 | 30° | 90. |
| SECCND RACAR | 1 1 1 1 1 1 1 | 66.42 | 16.78 | 2.93 | 90. | 1.60 | 0.0 | 99. | .27 | .12 | • 36 | 13.85 | • 35 | 1.64 | 10.81 | 88. | • 38 | a. | 9 0. | 51.64 | 34.41 | . 30 | 1.24 | 32.10 | • 16 | • 29 | • 11 | 12. | 17.23 | 9.10 | 10.1 | 16, 35 | 00 | *5* | 10 T | .12 |
| FIRST RADAR | | 91.50 | 56.39 | 8,68 | 06. | 26.30 | 5.63 | DC =1 | ** *** *** *** *** *** *** *** *** *** | 15. | | I 7. 3B | 24 | 01.42 | 13.50 | 10.10 | | DI. | • 10 | 10 · 40 · | 42.39 | | 3.5 | 91 0 9 | 92. | • 37 | 97.0 | 97. | 61.56 | | 3 4 6 | 66.00 |) ; f | 30. |) t | 67. |
| | | | OUT OF TOO | FUM MY SUU GANE AND SUU MANAGEMENT AND SUU MANAGEME | こうこ こんどうりょうこうこうこう じゅんせい マストロンター ひまん マス・コントン | TENT TABLESON DAY | CECEL COSTINE TES | TWO INTERPRETATION | 37173734 . 3874 | OTHER | | SYSTEM/PROGRAM MGY | | | CELE STREET YEAR | TACHTOLIST TO THE TACTOR | | מייי | FULL SCALE DEVEL COMENT | | TOW TOUR OF MOUNTAINED | こうこうこう つうばいつうご こうこうじょくしょう じょしゅんしょ しんかん しんかん しんかん しんかん | TEXT HADDINGE CAR | DECTIVATION OF THE TRAIN | TOO TWO AND TWO FAC | | OTHER | GOVERNER | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | PROTOTYPE TESTS | TOOLING AND IND FAL | | OTHER | |
| ¥0. | | . ~ | , e-7 | æ | ĸ | 4 | ~ | • | ď | 10 | ::: | 15 | 13 | * | 15 | 10 | 17 | 40 | 5 | 20 | 21 | 25 | 23 | 24 | 52 | 56 | 27 | 82 | 59 | 33 | 3.1 | 32 | 33 | 45 | 35 | |
| APPRO | | | | 80/0X | ROTE | ROTE | ROTE | RO/MC | ROTE | ROTE | | RD/08 | ROTE | ROTE | ROTE | R07 10 | ROTE | RDTE | | | RO/OM | ROTE | ROTE | ROTE | RD/MC | ROTE | ROTE | | RO/OH | ROTE | ROTE | ROTE | RD/MC | ROTE | ROTE | |

HCC SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLEET
PILOT PRODUCTION PHASE
(FY79 SP)

| | FIRST | SECOND | 1000 | 7 |
|-----------------------------|-------|------------------|-------------|---------|
| ROS CONT CLERNIA 1111 | RAUAR | XALAX IIIIIII | ASSALE | |
| INVESTMENT P | 20.19 | 16.07 | 1382.21 | 1418.37 |
| 37 PILOT/LIMITED FRCOUCTION | 10.90 | 8.72 | 15.98 | 3.8 |
| 38 NONRECURRING | 58.85 | 7.38 | 5.79 | 21.12 |
| CONTRA | 6.50 | 5.20 | 4.70 | 16.40 |
| SYST | • 50 | 01. | • 50 | 1.40 |
| 1 A04 | 1.00 | 08. | O.T. | 2.24 |
| SYST | 3.00 | 2. 40 | 3,00 | 04.6 |
| 1907 | • 26 | • 16 | 80. | ** |
| | 1.00 | . 8.0 | 97. | 2 - 20 |
| 45 OATA | • 20 | • 16 | 9 9. | ** |
| | • 10 | 80. | \$0° | •25 |
| 47 OTFER | .50 | o † • | • 20 | 1:1 |
| GOVERN | 2,35 | 1.88 | 1.05 | 5.32 |
| | • 25 | • 20 | •25 | .70 |
| SYST | 1. 0 | 00. | 0.4. | 2.20 |
| | • 10 | 8 0. | 10. | •25 |
| 1001 | • 30 | • 2 • | •12 | 99. |
| 53 0ATA | • 13 | 80. | 70. | .22 |
| | 97. | . 32 | .16 | |
| | • 20 | • 16 | 90. | さ |
| 56 RECURPING | 2.05 | 1.64 | 10.19 | 13.88 |
| CONTRA | 1.43 | 1.14 | 7.13 | 9.78 |
| | 66• | • 7 • | 6.95 | 8.73 |
| ECP/ | .10 | BO. | 70. | •25 |
| 1ST | .31 | .01 | 00. | -0. |
| 61 RIF-OUT, INSTALL, INTEG | • 32 | • 26 | .13 | |
| 62 OTHER | • 31 | • 0 1 | •0• | •05 |
| 63 GOVERNMENT | • 62 | 68. | 3.06 | 4.18 |
| 64 MISSION HARDWARE PROD | . 42 | • 34 | 2.98 | 3.74 |
| | • 10 | 80. | 70. | .22 |
| | . 01 | • 01 | 00. | *0 |
| R IP- | .38 | , 16 | £0. | •18 |
| | • 01 | .01 | a n. | • 0 5 |
| SHIP FLYAMAY COST | 3.79 | 3.03 | 712.94 | 719.77 |
| | | | | |

The second secon

HOC SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT IFE CYCLE COSTS - 10 SHIF FLEET FULL FRODUCTION PHASE (FY79 8M)

| RO# | COST | RADAR | K & DAR | MISSILE | TOTAL |
|-----|--|-----------|---------------|---------|----------|
| ; | terrible professional profession | 91.40 | 7 - 35 | 1366.23 | 1362.77 |
| | NONRECURRING | 68.4 | 3.51 | 1.76 | 9.65 |
| | | 3,39 | 2.71 | 1.36 | 94.7 |
| | SYSTEM/PROGRAM MGT | • 56 | £+• | •22 | 1.23 |
| | PRODUCTION ENGINEERING | 1.23 | 2 55 • | 5. | 2.71 |
| | SYSTEM TAE | . 25 | • 20 | .10 | . 55 |
| | LOGISTICS SUPPORT | • 10 | . 38 | 40. | • 2 2 |
| | OPERATIONAL SITE ACT | 97. | 87· | 77. | .22 |
| | TOURS AND THE | 0.00 | 90• | 00. | 60. |
| | DATA | 6.42 | 48. | .17 | 26. |
| | INITIAL TRAINING | . 33 | • 26 | .13 | .73 |
| | CITER | 07. | 25. | .16 | |
| | | 0.00 | 0.8 | 04. | 2,19 |
| | SYSTEM/PROCRAM MGT | 42. | • 15 | .10 | 10 S |
| | PAT ARTON | 6: | .0. | F 0 • | •19 |
| | LOGISTICS SUPPORT | 10 | - 8 0 | *0. | .22 |
| | DESMATIONAL SITE ACT | . 10 | . 38 | *0. | • 22 |
| | TCOLING AND IND FAC | 01. | 00. | 00. | 00. |
| | | •15 | .12 | .36 | mm. |
| | INITIAL TRAINING | • 12 | . 10 | \$0. | • 26 |
| | OTHER | •20 | • 16 | • 000 | 43. |
| | RECURFING | 4.80 | 3.84 | 1164.47 | 1375.12 |
| | CONTRACTOR | 1.90 | 1.52 | 1359,53 | 1362,95 |
| | MISSION PARDWARE PROC | • 55 | 77. | 708.14 | 709.14 |
| | | €7. | 5 P • | 647.36 | 647.41 |
| | | . 16 | 97. | 40. | •25 |
| | | .20 | •16 | ₽0. | ** |
| | 1ST DEST TRANS/PKG | . 24 | • 19 | 2.20 | 2.63 |
| | SUST TOOL, TEST EQUIP | • 16 | .13 | 1.46 | 1.75 |
| | RIP-OUT, INSTALL, INTEG | •52 | . 4.2 | .21 | 1.16 |
| | DIMER | • 10 | 80° | 40° | 22. |
| | GOVERNMENT | 2.96 | 2. 32 | 46.4 | 10.17 |
| | FISSION HARDNARE PROF | .24 | • 15 | 2.28 | 2.78 |
| | INITIAL SPARES | 16.0 | • 31 | .11 | •14 |
| | SUSTAINING ENGINEERING | . 10 | €0. | *0. | 22. |
| | ECP/ECO | • 20 | • 16 | . 3.8 | *** |
| | 1ST DEST TRANS/PKG | 11. | # O • | 76. | 10 M • 4 |
| | SUST TOOL. TEST EDUTP | 20. | • 36 | .62 | .75 |
| | A TO-OCCUPATION AND A TO-O | . 60 4 () | 1.66 | . 10° | 4.58 |
| | | | | | |

HOC SHIP CLASS - UNIT SHIF COSTS BY ECLIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLEET
CPERATION & SUPPORT PHASE
(FYTYS 8H)

| APPRO R | 1000 | | | | |
|---------------------------------------|---------------------------|------------|---------------|---|-------------|
| | | RACAR | RADAR | MISSILE | TOTAL |
| | | | 1 1 1 1 1 1 1 | | |
| | OPERATIONS AND | 14.15 | 11.50 | 230 • 55 | 256,21 |
| | OPERATIONS | 7,39 | 6.10 | 52.28 | 65.77 |
| • | | 15. | 6.45 | 42.59 | 43,61 |
| | | L O | | 42.49 | 42.61 |
| N N N N N N N N N N N N N N N N N N N | | 900 | 07. | .10 | 1.00 |
| | 9 | 6.83 | 5.64 | 69•6 | 22,16 |
| OM/MP 1 | ORG ANIZ | 4.50 | 4.50 | 90.00 | 18.89 |
| | 116 EQUIFMENT LEASEHOLD | 1,000 | 00. | •20 | 2.01 |
| <u>ي</u> | OPERATIO | 36 | . 24 | •15 | 69* |
| , | | .03 | 20. | *1. | . 19 |
| OMN | | 1.10 | 80° | .26 | 1.28 |
| | 122 LOGISTIC SUPPORT | 00 • 9 | 98.7 | 176-12 | 186.92 |
| • | CONTRACTOR | 1,62 | 1.30 | .32 | 3.24 |
| | SYSTEM | • 15 | .12 | m 0 • | F. |
| OMN NEO | | .13 | • 10 | MO. | 92. |
| | Y 19 GUS | 1.10 | . 88 | •22 | 2.28 |
| PQ/0M | | 30.4 | | • 20 | 2.08 |
| | TRANS | • 10 | 80° | •05 | • 20 |
| | 70 | . 14 | • 11 | m | .20 |
| OHN | 128 OTHER ILS | . 10 | 90. | .02 | .2 |
| | 9 | 4.38 | 3,50 | 177.60 | 185.68 |
| NAO | SYSTEM ILS MANAGEMENT | 34.6 | • 32 | ₩0. | 96. |
| | MATATAM | 1.42 | 1.14 | •26 | 2.64 |
| DH/HC 1 | ш | .72 | .58 | .14 | 1.44 |
| | | • 60 | 97. | .12 | 1.20 |
| | SUPPOR | .16 | 80. | •05 | .20 |
| NAO | SYS ENG. | .32 | , 2É | 90. | *9 * |
| | SUPPLY | 1.99 | 1.59 | 177.32 | 180.98 |
| OM/MP 1 | > | 36. | • 5 • | 90. | 9. |
| | | • 36 | • 29 | .0.7 | .72 |
| | SPARE P | 1.00 | □ 0 • | 177-12 | 178.92 |
| | INVENT | .23 | . 18 | \$0° | 9** |
| | | • 10 | 60 • | 10 (0 • | 12. |
| | DATA AND | • 15 | • 12 | M | |
| | OTHER ILS | •10 | 80. | 5.63 | 120 |
| | 144 CONTRACTOR - TRAINING | 0.00 | 000 | 00.0 | DO.0 |
| | GOVERNMENT - | 34. | . 37 | 5 | 26. |
| OMN 1 | E CCNTRACTOR - | .15 | . 10 | 17 (S · | F |
| | | • 15 | . 12 | M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | DE . |
| - | 148 TOTAL | 125.74 | 30.96 | 2027-97 | 1.796422 |

FCCTNOTE 2

FFX SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT LIFE CYCLE COSTS - 10 SHIP FLEET LIFE CYCLE COSTS - 10 PHAST

| はいせいよ | |
|-------|------|
| J | ŝ |
| _ | ¥ 79 |
| 2 | (FY |
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| | |

| TOTAL | | 5 66 . 7 1 | 49.62 | 17.24 | .70 | 2.88 | 11.28 | 1.40 | e . | .21 | 8 M • | 32,38 | 98. | 2.88 | 91.42 | 1.54 | •14 | •10 | 11. | 4.57.89 | 414.83 | .53 | 2,17 | 410.65 | 04. | .51 | 619 | .37 | 42.27 | .17 | 96. | 40.15 | 12. | . 42 | •1• | .21 |
|----------------|---|-------------|------------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------|-------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------------|-------|------------------------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|--------|-------|-----------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|----------|
| HISSILE | | 415.21 | 22.63 | 7.55 | .20 | 00. | 5.65 | ot. | .14 | 90. | .30 | 15.08 | •16 | 0.00 | 13,56 | 74. | 70. | 70. | 10. | 392.58 | 371.64 | .15 | 29. | 370.55 | .20 | •15 | • 0 2 | •11 | 20.75 | .05 | .28 | 23.10 | •10 | .12 | *0. | • 0 6 |
| SECCND | | 00.0 | 00.0 | 0.00 | 90 °u | 06.30 | 00.0 | 00.0 | 00°0 | 00.0 | 00.0 | 90.0 | 00.0 | 0.00 | 00.00 | 00.00 | 00 • 3 | 00.0 | 3.68 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 07.0 | 00.3 | G. 0.0 | 2000 | 00.0 | 99.0 | 00.7 | 00.0 | 00.0 | 00.00 | 00.7 | 5.00 |
| FIRST RADAF | * | 91.50 | 56.69 | 69*6 | .50 | 6r.es | 5.63 | 1.00 | 45. | • 15 | 80 · | 17.30 | 04. | 2.00 | 13.50 | 1.10 | •10 | • 10 | •10 | 64.51 | 42.99 | • 38 | 1.55 | 40.10 | • 26 | • 37 | • 14 | • 26 | 21. 52 | .12 | 37. | 20.05 | • 10 | 98. | .10 | •15 |
| GOST ELEMENT | | ROTEE PHASE | VALIDATION | CONTRACTOR | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAR | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | GOVERAMENT | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | FULL SCALE DEVELCPMENT | CONTRACTOR | SYS/PROG/LCG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWAPE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | COVERNENT | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | PROTCTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER |
| £0 | : | - | ~ | m | 3 | L P | ¥ | ^ | œ | σ | 10 | 11 | 12 | ~ ; | 1.4 | 1 1 | 16 | 11 | 1.8 | 15 | 20 | 21. | 22 | 23 | 5 | 25 | 56 | 27 | 82 | 52 | 36 | 31 | 32 | 33 | ¥ | 65 PS |
| APPRO | | | | | RD/ON | ROTE | RDTE | RDTE | ROZHC | ROTE | ROTE | | RO/OH | ROTE | ROTE | ROTE | RD/HC | RDTE | ROTE | | | ROZOM | ROTE | ROTE | ROTE | RD/HC | ROTE | ROTE | | RD/OM | ROTE | ROTE | ROTE | RD/MC | ROTE | ROTE |

FFX SHIP CLASS - UNIT SHIF COSTS BY ECUIPMENT ELEMENT
LIFE CYCLE GOSTS - 10 SHIF FLET
FILOT PFODUCTION PHASE
(FY79 8H)

| TOT AL | 1402+30 | 26.88 | 14.64 | 11.20 | 1.00 | 7.1 | 00.9 | • 28 | 1.48 | •2• | •16 | .70 | 44.6 | .50 | 1.40 | •14 | .42 | *1* | •56 | •28 | 12.24 | 8.55 | 7.94 | •14 | .0. | . 4.5 | .0. | 3.68 | 3.40 | *1* | . | .11 | .01 |
|--------------|------------------|--------------------------|--------------|------------|--------------------|--------------------|------------|------------------|---------------------|-------|------------------|--------|------------|--------------------|------------|------------------|----------------------|---------|------------------|-------|------------|------------|-----------------------|------------|--------------------|-------------------------|-------|------------|-----------------------|---------|--------------------|-------------------------|---------|
| MISSILE | 1382e21 | 15.98 | 5.79 | 0.4 | 05. | 94. | 3.00 | €0.0 | ٠, د و | • 38 | 40° | •20 | 1.09 | • 25 | 0,0 | 46. | • 12 | 70. | •16 | 63. | 10.19 | 7,13 | 6.95 | 70° | 00. | €1. | 00. | 3.06 | 2.98 | *0. | 00. | .03 | 00• |
| SECOND | 0001 | 0.33 | 0.30 | ם ייני | 00.00 | 00 • 1 | 00.0 | 00•) | 90.1 | 00.0 | 00.0 | 0. • C | 00.0 | 0.00 | 00.00 | 00.0 | 00.0 | 0.0 • 0 | 00.0 | 90.1 | 0.0 | 0.00 | 00.3 | 80.0 | 00.0 | 0.00 | 00.0 | 00 • 0 | 00 • 0 | 00.1 | 00.0 | 00 • 0 | r • 0.0 |
| FIRST | 6: 492 | 10.90 | 8.85 | 6.50 | 950 | 1.00 | 3• 10 | • 50 | 1.10 | • 20 | • 16 | JS* | 2 • 35 | • 25 | 1.60 | •10 | 30 | • 10 | 34. | • 20 | 2.05 | 1043 | 6F • | • 10 | 10. | •32 | .41 | •62 | - 42 | • 10 | • 01 | ₽ 3• | 17. |
| COST ELEMENT | INVESTMENT PHASE | PILOT/LIMITED FRODUCTION | NONRECURPING | CONTRACTOR | SYSTEM/PROGRAM MGT | ADV PRODUCTION ENG | SYSTEM TEE | LCGISTIC SUPPORT | TCCLING ANT IND FAC | DATA | INITIAL TRAINING | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEM T&E | LCGISTIC SUPFORT | T COLING ANE IND FAC | CATA | INITIAL TRAINING | OTHER | RECURFING | CONTRACTOR | MISSION HAFDWAKE PROD | ECP/EC0 | 1ST DEST TRANS/PKG | RIF-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION PARDWARE PROD | ECF/EC0 | 1ST DEST TFANS/PKG | RIP-OUT, INSTALL, INTEG | OTHER |
| * 0 | | 37 | 36 | 3,5 | ب • | 1,4 | 25 | P) | 3 | u) | 9 | 7 | e) | 9 | 20 | 51 | 52 | 53 | 24 | 5.5 | 2 € | 25 | 5.6 | 20 | 9 | 61 | 29 | 63 | 94 | 6.5 | 99 | 67 | 6.8 |
| 08444 | | | | | PR/OH | PROC | PR/C# | PROC | PR/FC | PR/OH | PR/OM | PROC | | PRIOM | PR/OH | PROC | PRIME | PR/OM | PR/CM | PROC | | | PROC | PROC | PR/OM | PROC | PROC | | PROC | PROC | PR/CH | PROC | PROC |

716.73

712.94

00.0

3.79

SHIP FLYABAY COST

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FFX SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT LIFE CYCLE COSTS + 10 SHIF FLEET

| SHIF FLEE! | 3S WHd | |
|------------------|-----------------------|------------|
| CACLE COSIS - 19 | FULL FRODUCTION PHASE | (FY 29 SH) |
| רזינ | | |

| TOTAL | | 1375.42 | 6.14 | 4.75 | .78 | 1.72 | 30. | •14 | 11. | = | •53 | 94. | •56 | 1.40 | 46. | .12 | •14 | * 7. | 00. | •21 | -17 | •28 | 1369,28 | 1361.43 | 706.70 | 647.39 | • 14 | .28 | 2.44 | 1.62 | .73 | .14 | 7.85 | 2.51 | .13 | .14 | •28 | 1.05 | 69. | 2.91 | •14 |
|----------------|---|-----------------|-------|------------|--------------------|------------------------|------------|-------------------|----------------------|---------------------|-------|------------------|------|-----------|--------------------|-------|---------|--------------|---------------------|---------------|------------------|------|-----------|------------|-----------------------|----------------|------------------------|---------|--------------------|---------------|-------|------|------------|-----------------------|-------|------------------------|------------|--------------------|-----------------------|-------------------------|-------|
| MISSILE | | 1366.23 | 1.76 | 1,36 | •22 | 67. | .10 | 40° | 70. | 00. | .17 | •13 | • 16 | 94. | .10 | £0. | 70. | 70. | ao• | • 06 | 50. | 80. | 1364.47 | 1359,53 | 708.14 | 647,36 | 70. | .0.6 | 2.20 | 1.46 | .21 | *O* | 76.7 | 2,28 | •11 | *0. | 80. | *6* | 29* | m. | *0 |
| SECCND | | 00 •0 | 0.00 | 0.00 | 00 • 3 | 00•. | 00.0 | 0.9*3 | 0.00 | 00.0 | 00.0 | 0.00 | 0.00 | 00.0 | 00 • 0 | 00.0 | 0 y • 0 | 9 • 0 | 00 • 0 | 00 • 0 | 00.3 | 00.0 | 00 • 0 | 00*7 | 90.7 | 06 • 0 | 00.0 | 00.0 | 90°0 | 50 • 3 | 00.00 | 00.0 | 90.0 | 00 • .7 | 00.0 | 0.00 | 00°U | 00 • 0 | 00 • 0 | 90.0 | 0.00 |
| FIRST RADAR | | 9,19 | 4, 39 | 3,39 | •56 | 1,23 | • 25 | .10 | 01. | 83. | 24.5 | . 33 | 39. | 1.00 | • 54 | 60. | 10 | 10 | 00. | •15 | .12 | • 20 | 4.80 | 1.96 | • 55 | €0. | • 16 | •26 | .24 | • 16 | 25* | • 10 | 2.90 | • 24 | • 0.1 | • 10 | •20 | 110 | 20 | 2000 | 010 |
| COST ELEMENT | i | FULL PRODUCTION | | CONTRACTOR | SYSTEM/PROGRAM MGT | FRODUCTION ENGINEERING | SYSTEM TEE | LOGISTICS SUPPORT | OPERATIONAL SITE ACT | TCCLING AND IND FAC | 0.414 | INITIAL TPAINING | | GOVERNENT | SYSTEM/PROGRAM MGT | | _ | | TCOLING AND IND FAL | DATA | INITIAL TRAINING | | RECURRING | CONTRACTOR | MISSION HARDHAKE PROD | INITIAL SPARES | SUSTAINING ENGINEERING | ECP/ECO | 1ST DEST TFANS/PKG | | - | | GOVEPNMENT | MISSION HARDWARE PROC | | SUSTAINING ENGINEERING | ECP/ECO | 1ST DEST TRANS/PKG | SUST TOOL, TEST EQUIF | RIF-OUT, INSTALL, INTEG | OTHER |
| 3 0 | | 9 | 7.7 | 7.1 | 7.2 | 73 | 7.0 | 75 | 4 | 1 | 7.8 | 52 | 9 0 | | 35 | 80 | 8 | . R | . w | 3.7 | 98 | 5.00 | 36 | 116 | 35 | 6 | * 6 | 36 | 36 | 37 | 96 | 56 | 100 | 101 | 132 | 103 | 134 | 135 | 136 | 101 | 108 |
| APFRO | | | | | PR/OH | PROC | PR/OH | PROC | PRINC | PR/HC | PR/OM | PR/OH | PROC | ! | PR/OH | PR/OH | PROC | PR/HC | PZ/MC | PR/OH | PRIOH | PROC | | | PROC | PR/04 | PROC | PROC | FP./OM | PROC | PROC | PROC | | PROC | PR/OH | PROC | PROC | PRION | PROC | PROC | PROC |

FFX SHIP CLASS - UNIT SHIF COSTS BY EQUIFFINT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLEET
GFERTION & SUPPORT PHASE
(FYT9 8F)

| TOTAL | 1 0 0 0 0 0 | 256.21 | 65.77 | 43.61 | 42.61 | 7.00 | 22 • 16 | 16.00 | 2.00 | 69• | .19 | 1.28 | 168.92 | 3.24 | 08. | •26 | 2.20 | 2.00 | • 20 | • 2 8 | • 20 | 185.68 | 00. | 2.84 | 1.44 | 1.20 | • 20 | •9• | 169.90 | 9. | .72 | 176.92 | 94. | • 20 | • 30 | 02. | 00.0 | 26. | 08. | 90° | 2165,22 | |
|----------------|-------------|-------------------------------|------------|------------|-------------|-------------|------------|--------------------------|---------------------|------------------------|-------------|-------|------------------|------------|-----------------------|------------------------|--------|-------------------------|------|------------------------|-------------|------------|-----------------------|-------------|------------------------|-----------------------|-------|------------------------|--------|-------|------------|-------------------------|-----------------|-------------|------------------------|-----------|------|-----------------------|--------------------|--------------------|---------|--|
| MISSILE | | 230.55 | 52.28 | 42.59 | 64.24 | •10 | 59*6 | 00*6 | • 26 | •15 | 41. | • 5 0 | 178.12 | .32 | ₩ O • | .03 | •25 | .20 | 20.0 | .03 | \$ D. | 177.88 | 80° | .28 | •1• | •12 | • 0 5 | ÷0. | 177.32 | •06 | 20* | 177.12 | . O. | 20* | • 0 3 | . D 2 | 00.0 | 8 C • | E0. | £0° | 2027.97 | |
| SECCNO | | 11.50 | 6. 10 | . tu | ٠. وي. | 07. | 2.64 | 4.50 | 08. | • 24 | 20. | 90° | 00.7 | 1.30 | • 12 | • 10 | 88. | .80 | .08 | • 11 | 80 • | 3.50 | .32 | 1.14 | • 518 | 87. | B0. | • 26 | 1.59 | • 2 • | • 2 6 | 0.80 | • 18 | 8 0. | • 12 | 80. | 00.0 | .37 | • 12 | .12 | 11.50 | |
| FIRST RADAR | | 14,15 | 7 • 39 | .57 | 29. | • 50 | 6.83 | 4.50 | 1.00 | • 30 | m ? · | 1.36 | 36.9 | 1.62 | • 15 | • 13 | 1.10 | 1.00 | • 10 | • 14 | • 10 | 4. 38 | £4. | 1.42 | •72 | • 60 | • 10 | • 32 | 1.99 | .30 | • 36 | J••1 | • 23 | •10 | •15 | • 10 | 03 | 97. | • 15 | • 15 | 125.74 | |
| COST ELEMENT | | OPERATIONS AND SUPFICET PHASE | OPERATIONS | CONTRACTOR | CONSUMABLES | OTHER | GOVERNMENT | ORGANIZATIONAL PERSONNEL | EQUIPMENT LEASEHOLD | OPEFATIONAL FACILITIES | CONSUMBBLES | OTHER | LOGISTIC SUPPORT | CONTRACTOR | SYSTEM ILS MANAGEMENT | SYS ENG, FIELD SERVICE | SUPFLY | SPAPE PARTS, REPAIR MAT | | DATA AND DOCUMENTATION | OTHER ILS | GOVERNMENT | SYSTEM ILS MANAGEMENT | MAINTENANCE | PAINTENANCE FACILITIES | MAINTENANCE FERSONNEL | - | SYS ENG, FIELD SERVICE | | | FACILITIES | SFARE PARTS, REPAIR MAT | INVENTORY ADMIN | | DATA AND DOCUMENTATION | OTHER ILS | ٠ | COVERNMENT - TRAINING | CONTRACTOR - OTHER | GCVERNMENT + OTHER | TOTAL | |
| ROW | : | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 124 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 145 | 143 | 144 | 145 | 146 | 147 | 146 | |
| APPRO | | | | | Z NO | Z Z O | | OH/HD | Z | OM/MC | N O | ZHO | | | A MO | Z TO | | PR/CH | Ž | N O | NHO | | N O | | O#/HC | CH/HP | N TO | N O | | OM/HP | OH/HC | PR/0H | N I | N N O | Z E | Ž V | NO | Z NO | NEO | N N | | |

FCCTNOTE 1 FCCTNOTE 2

SLCCM TESTCASE DATA

DD-963 SHIP CLASS - UNIT SHIP COSTS BY ECUIPMENT ELEMENT
LIFE CYCLE COSTS - 10 SHIP FLEET
R C T & E PPASE
(FY79 8H)

| TOTAL | | 1.59.92 | 43.77 | 12.62 | • 10 | 3.60 | 5.63 | 1.80 | .61 | .27 | .14 | 31.15 | .72 | 3.60 | 24.31 | 1.98 | .18 | .18 | .18 | 116.15 | 27.48 | 89. | 2.79 | 72.20 | •36 | 99* | 42. | k 4 • | 38.75 | • 22 | 1.26 | 36.10 | .18 | • 50 4 | .18 | .27 |
|-----------------------|---|-------------|------------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------|-------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------|-------|------------------------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|---------|
| MISSILE | | 00.0 | 00.0 | 3.00 | 0°0 | 0.00 | 0.000 | 00.0 | 90.0 | 00.3 | 00.0 | 0.00 | 3.76 | 30.0 | 00.00 | 30.0 | 90.0 | 0.00 | 0.00 | 0.00 | 00.7 | 00.0 | 0000 | 00.0 | 0.00 | 0.36 | 00.0 | 00.0 | 20.0 | 00.0 | 00.0 | 9.00 | 00.0 | 00.0 | 00.0 | 0.00 |
| SECON RADA RADA | | 68.42 | 16.78 | 2.93 | . 38 | 1.60 | 0.0 | 28. | .27 | .12 | 90. | 13,85 | . 32 | 1.60 | 10.81 | 88. | 90. | 80. | 86. | 51.64 | 34.41 | 08. | 1.24 | 32.10 | .16 | • 29 | • 11 | . 21 | 17.23 | • 10 | • 56 | 16.35 | 90 | ¥2. | €0. | • 12 |
| FIRST RADAR | | 91.50 | 56, 59 | 69*6 | 9.50 | 2.10 | 5.63 | 100 | . 34 | • 15 | 90. | 17.30 | 0,7 • | 6.00 | 13,50 | 1.16 | • 10 | .10 | • 10 | 64.51 | 42.99 | • 38 | 1.55 | 46.10 | • 20 | . 37 | •14 | • 26 | 21.52 | •12 | 67. | 20 · LF | • 10 | 98. | • 16 | •15 |
| CCST ELEMENT | | RCTLE PHASE | VALIDATION | CONTRACTOR | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | DEVELOPMENT TAE | INDUSTRIAL FACILITIES | DATA | OTHER | FULL SCALE DEVELOPMENT | CONTRACTOR | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWAPE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | GOVERNMENT | SYS/PRCG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWAPE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | ባልፒል | OTHER |
| 3 (1) | : | - | ٠. | ~ | 3 | Ų, | • | ^ | • | ŗ | 10 | 11 | 12 | P) | 7.7 | <u>د</u> . | 16 | 17 | 16 | 13 | 2.0 | 2.1 | 25 | 23 | 5 2 | 52 | 5€ | 27 | 3€ | 58 | en M | 31 | 32 | 33 | 34 | u ¥7 |
| APFRO | | | | | R0/08 | ROTE | ROTE | ROTE | RD/HC | ROTE | ROTE | | RD/CM | ROTE | ROTE | ROTE | RD/MC | ROTE | ROTE | | | R0/0# | POTE | ROTE | ROTE | RO/HC | RDTE | ROTE | | RO/CH | ROTE | ROTE | POTE | RD/MC | ROTE | ROTE |

DD-963 SHIP CLASS - UNIT SHIF COSTS BY EQUIFMENT ELEMENT

| LIFE CYCLE COSTS - 10 SHIF FLEET | FILCT PRODUCTION FHASE | (F8 79 PM) | |
|----------------------------------|------------------------|------------|--|
| | | | |

| TOTAL | 36,16 | 19.62 | 15.93 | 11.70 | 96. | 1.88 | 5.40 | 98. | 1.60 | .36 | . t 6 | 06. | 4.23 | • 45 | 1.80 | .16 | • 54 | .16 | .72 | •36 | 3.69 | 2.57 | 1.78 | .16 | | 85. | .02 | 1.12 | 9.4 | .18 | -02 | .14 | .02 |
|-----------------|------------------|--------------------------|--------------|------------|--------------------|---------------------|------------|------------------|---------------------|-------|------------------|-------|------------|--------------------|------------|------------------|---------------------|-------|------------------|-------|-----------|------------|-----------------------|---------|--------------------|-------------------------|---------|------------|-----------------------|----------|--------------------|-------------------------|----------------|
| HISSILE | 0.0 | 0.0 | 00.0 | 00.0 | 0.00 | 90.0 | 99.0 | 00.0 | 00.0 | 3.36 | 00.0 | 00.0 | 93.0 | 90.00 | 0.00 | 30 °0 | 3.00 | 00.0 | 00.0 | 0.00 | 30.0 | 90.0 | 0.00 | 0.00 | 00.0 | 00.0 | 50.0 | 00.0 | 30.0 | 30.00 | 3.6.0 | 0.0 | 0.0.0 |
| SECOND RACAR | 16.07 | 6.72 | 7.38 | 5.20 | 0.7. | 08. | 2.40 | . 16 | 98. | • 16 | 90.● | 07. | 1.68 | 02 • | 0.8 | an 0. | • 5 4 | ₽0• | - 32 | • 16 | 1.64 | 1.14 | 52* | €0. | .01 | • 26 | • 01 | • 50 | 70. | 95. | • 04 | 90. | • 0 1 |
| FIRST | 20.05 | 10.90 | 6.85 | €.50 | • 50 | 1.00 | 3,0€ | • 20 | 1.1 | .2t | • 10 | 35* | 2.35 | • 25 | 1.30 | •10 | • 30 | • 10 | 37. | •20 | 2.05 | 1.43 | 66* | • 10 | 10. | • 32 | # (C) • | - 55 | 27. | 010 | • 61 | .0e | • 61 |
| COST | TRYESTMENT PHANE | PILOT/LIFITED FRCOUCTION | NONRECURRING | CONTRACTOR | SYSTEM/PROCRAM MGT | A DV PRODUCTICN ENG | SYSTEM T&E | LOGISTIC SUFFORT | TCOLING AND IND FAC | DATA | INITIAL TPAINING | OTHER | COVERNMENT | SYSTEM/PROGRAM MGT | SYSTEM TAE | LOGISTIC SUPFORT | TCOLING AND IND FAC | DATA | INITIAL TRAINING | 01+ER | RECURRING | CONTRACTOR | MISSION FAFDWARE PROD | ECF/EC0 | 1ST DEST TFANS/PKG | PIF-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION HAFDWARE PROD | E CP/ECO | 1ST DEST TRANS/PKG | KIF-OUT, INSTALL, INTEG | 0 T HER |
| 0.4 | | | 30 | 33 | 9 | 1 | ر 4 | P) P) | \$ | 5 | t. | ., | بو ج | 3 | 5.5 | 51 | 25 | 53 | 54 | 55 | 26 | 2.5 | 5.8 | 56 | (.) (0) | 51 | 29 | £ 9 | 49 | 9 | 99 | 67 | 5.8 |
| APPRO | | | | | PR/CM | PROC | PR/0H | PROC | PR/MC | PR/CH | PR/CH | PROC | | PR/CH | PR/CH | PROC | PR/MC | PR/CM | PR/OH | PROC | | | PROC | PROC | PR/CH | PROC | PROC | | PROC | PROC | PR/CH | PROC | PROC |

6.03

9.10

3.03

3.79

SHIF FLYAWAY GOST

DD-963 SHIP CLASS - UNIT SHIF COSTS BY EQUIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLET
FULL FRODUCTION FFASE
(FY79 %P)

| TOTAL | 16,54 | 1.90 | 6.10 | 1.01 | 2,21 | 54. | .18 | . 18 | 00. | 91. | .59 | .72 | 1.79 | M.J. | •16 | .18 | . 16 | 90. | .27 | .22 | •36 | 8.64 | 3.42 | 66. | | .18 | 98. | n d · | .29 | 46 | • 18 | 5.23 | nt. | .02 | .18 | •36 | .19 | £4. | 3.74 | 81. |
|-----------------|------------------|---------------|------------|--------------------|------------------------|------------|-------------------|-------|---------|-------|------------------|------------|------------|--------------------|------------|-------------------|----------------------|---------------------|-------|------------------|-------|-----------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------------------------|-------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------------------------|-------|
| MISSILE | 30.0 | 00.0 | 0.00 | 0.00 | 30.0 | 0.00 | or.0 | 00.0 | 0.0 • 0 | 90.0 | 00.0 | 00.0 | 0.00 | 90.0 | 99.0 | 90.7 | 0.00 | 0.00 | 00.0 | 00.0 | 30.00 | 00.0 | 30.0 | 0.36 | 00.0 | 00.0 | 00.0 | 00*0 | 00.0 | 00.0 | 00.0 | 99.0 | 0.0 | 00.0 | 0000 | 0.00 | 00.0 | 3.00 | 00.0 | 0.0 |
| SECOND FADAR | 7.35 | 3,51 | 2.71 | 4.00 | 85. | • 20 | Ø 3 • | 80. | 00. | 4 M • | • 2 € | 3 80 | 08. | • 1.9 | 70. | 97. | 90. | 07. | .12 | . 10 | . 16 | 3.84 | 1.52 | 33. | • 0 5 | 80. | • 16 | • 19 | et. | . 4.2 | ® a • | 2.32 | • 10 | • 01 | 00. | • 16 | . J. | • 106 | 1.66 | 90. |
| FIRST KADA÷ | 9.19 | 4.39 | 62.02 | • 56 | 1.23 | • 25 | • 10 | • 10 | 96. | - 42 | €33 | 07. | 1.,0 | *5* | 6, | • 10 | *10 | 07 • | . 15 | • 12 | • 20 | 4 • 80 | 1.96 | 95. | €0.• | • 10 | • 26 | • 24 | •16 | •52 | •10 | 2.90 | •24 | 11. | • 10 | • 2f | • 11 | 20. | 2.7 | • 10 |
| CCST FLEMENT | FULL PP CCUCTION | NONFFICERFING | CONTRACTOR | SYSTEM/FROGRAM MGT | PRODUCTION ENGINEEPING | SYSTEM T&F | LCGISTICS SUPPORT | 0 | | DATA | INITIAL TRAIDING | | GOVERNMENT | SYSTEM/PROGRAM HGT | SYSTEM TRE | LOGISTICS SUPPORT | OFERATIONAL SITE ACT | TCOLING ANC IND FAC | | INITIAL TRAINING | | RECURFING | CONTRACTOR | MISSION HARDWARE PROD | INITIAL SPARES | SUSTAINING ENGINEERING | 606/600 | 1ST DEST TPANS/PKG | SUST TOOL, TEST EQUIF | RIP-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION HAFOLAKE PROL | INITIAL SPARES | SUSTAINING ENGINEERING | ECP/ECO | 1ST DEST TFANS/PKG | SUST TOOL, TEST EQUIF | RIF-DUT, INSTALL, INTEG | 01HEP |
| ¥ 0 | 59 | 7. | 7.1 | 7.5 | 2.4 | 7.4 | 75 | 3.6 | 7.7 | 7.5 | 5,2 | , 3 (1) | 8 1 | 82 | Ю 60 | 46 | er u | 36 | 8.7 | 96 | 8 8 | 36 | 91 | 26 | 93 | 34 | 36 | 36 | 45 | 9.6 | 66 | 136 | 101 | 112 | 113 | 40.4 | 115 | 10E | 1.17 | 104 |
| AP FR0 | | | | PR/CH | PROC | FR/OH | PROC | PR/HC | PR/HC | PRICH | PRICH | PROC | | PP/04 | PR/CH | PROC | PR/HC | PRIMC | PR/OH | PP/CM | PROC | | | PROC | PR/CM | PROC | PROC | PR/OH | PROC | PROC | PROC | | PROC | PR/0H | PROC | PROC | PRION | PROC | PROC | PROC |

DD-963 SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT LIFE CYCLE COSTS - 10 SHIF FLEET OPERATION & SUPPORT PHASE FFY79 SHI

| TOTAL | 256.21 | 65.77 | 43.61 | 42.61 | 1.00 | 22.16 | 18.00 | 2.00 | 69* | .19 | 1.28 | 186.92 | 3.24 | 08. | • 26 | 2 • 20 | 2.08 | 120 | 92' | .20 | 185.68 | 00. | 2.84 | 1.44 | 1.20 | .20 | 49. | 160.90 | • • • | . 7.5 | 176.92 | 0.0 | 12. | BM • | • 20 | # · · · | 26. | 98. | e m | 452.29 |
|-------------|---|-------|------------|-------------|-------|------------|--------------------------|---------------------|------------------------|-------------|-------|------------------|------------|------|------------------------|--------|-------|-------|------------------------|-----------|---------|-----------------------|-------------|------------------------|-----------------------|---------------------|------------------------|--------|-------|-------|-------------------------|------|---------------------|------------------------|-----------|-----------------------|------|--------------------|------|--------|
| HISSILE | 230 • 55 | 52.28 | 42.59 | 45.49 | • 10 | 69•6 | 00.6 | •20 | •15 | •14 | •20 | 178-12 | •32 | .03 | .03 | •25 | • 20 | ÷0. | €03 | . 0 2 C | 177.80 | 90. | 428 | .14 | .12 | • 0.5 | 90* | 177,32 | 90, | 29. | 177,12 | 50. | .0. | FO. | 20° | 00.00 | 60. | £0. | 80° | 230.55 |
| SECCND | 11.50 | 6.10 | • 45 | • 02 | | 5.64 | 4.50 | 08. | • 5 4 | 20. | ₽0• | 7.8.9 | 1.30 | • 12 | • 10 | 90. | 00. | • 0 • | • 11 | • • | 3.50 | • 32 | 1.14 | .56 | 67. | 80. | 92. | 1.59 | .24 | • 29 | 80 • | • 18 | 90. | • 12 | 90• | 00.0 | • 37 | •12 | . 12 | 96.00 |
| FIRST | 1 4 4 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 | 7.39 | 15. | .07 | 05° | 6.83 | 4.50 | 1.00 | .30 | • 03 | 1.00 | 0°•9 | 1.62 | • 15 | .13 | 1.10 | 1.00 | • 10 | • 14 | •10 | 4.38 | 0,4 | 1.42 | • 72 | 09• | • 16 | • 32 | 1.99 | • 30 | • 36 | 1+00 | • 23 | • 10 | • 15 | •10 | 00.0 | 94. | • 15 | • 15 | 125.74 |
| OST ELEMENT | OPERATIONS AND SUPFORT PHASE | | CONTRACTOR | CONSUMABLES | OTHER | GOVERNMENT | ORGANIZATIONAL PERSONNEL | EQUIPMENT LEASEHOLD | OPERATIONAL FACILITIES | CONSUMABLES | OTHER | LOGISTIC SUPPORT | CONTRACTOR | | SYS ENG, FIFLD SERVICE | | | • | DATA AND DOCLMENTATION | OTHER ILS | GOVERNT | SYSTEM ILS MANAGEMENT | MAINTENANCE | MAINTENANCE FACILITIES | MAINTENANCE PERSONNEL | SUPPORT EDLIF MAINT | SYS ENG, FIELD SERVICE | | | | SPARE PARTS, REPAIR HAT | | TRANS AND FACKAGING | DATA AND DOCUMENTATION | OTHER ILS | CONTRACTOR - TRAINING | • | CONTRACTOR - OTHER | ٠ | TOTAL |
| ¥ 0 | 108 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 125 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 146 |
| APPEO | | | | Z T O | Ž | | OH/HD | Ž | OM/HC | Ž HO | N N | | | N NO | Ž | | PR/CH | Z Y O | Z F O | NF O | | NEO | | OH/HC | OM/MD | OM2 | Ž N | | OM/MD | OM/MC | PR/OH | Z | N N | OH. | NEO | N NO | Z O | N O | NHO | |

FOOTNOTE 2

ADE SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT ELEMENT LIFE CYCLE COSTS - 13 SHIP FLEET F 0 T (E PHASE (FY70 BM)

| TOTAL | 367.53 | 55.09 | 16.40 | • 6 | 00.4 | 8.45 | 2.00 | 99. | 08. | .29 | 38.69 | 8. | 00.4 | 31.09 | 2.20 | . 20 | • 20 | • 50 | 312044 | 263,32 | 9. | 91.0 | 257.48 | Ø 1 | 87. | 12. | 25. | 49.12 | • 5 • | 1.48 | 46.15 | .23 | • • | 02. | • 30 |
|-----------------|-------------|------------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|-------|-------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|------|-------|------------------------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|------------|-----------------------|---------------------|-------------------|-----------------|-------|-------------|---------|
| PISSILE | 207.61 | 11,31 | 3.77 | .11 | 07. | 2,83 | • 5 0 | .07 | E) C) | .15 | 7.54 | . | O . | 5.78 | .25 | • 32 | ÷0.5 | 20. | 196.29 | 185.92 | 90.0 | 15. | 165.26 | 0 1 0 | \ C.* | (D) | 90* | 10,37 | 50. | •14 | 13.05 | 5 3• | 90. | (V) | ۵. |
| SECOND RACAR | 54.46 | 16.78 | £6.3 | 9 0 • | 1.60 | 90.0 | 00. | .27 | -12 | • 36 | 13.85 | - 32 | 1.60 | 1.7.81 | 5 00° | 8°C • | &□. | 80° | 51.64 | 34.41 | G M ◆ | 1.24 | 32.10 | • 16 | • 59 | •11 | • 21 | 17.23 | • 10 | • 56 | 16.05 | BC. | • 24 | 80° | • 12 |
| FIRST RAGA: | 91.50 | 26.19 | 69*6 | 05° | ŭ. • ż | 5.63 | 36.46 | 34. | .15 | a) . | 17.30 | 04. | 0.42 | 13.50 | 1.10 | 01. | • 10 | • 10 | 64.51 | 42,99 | ●38 | 1.55 | 40.10 | • 20 | 22 | • 14 | • 56 | 21.52 | • 12 | 92. | 20.05 | • 10 | .30 | • 10 | • 15 |
| פפסד לנישישד | ia. Iti! | VALIBATION | CONTRACTOR | SYSTEM/PROGPAN MGT | SYSTEMS ENGINEERING | TEST HARDHARE FAB | DEVELOPMENT IRE | INDUSTRIAL FACILITIES | DATA | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAE | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | FULL SCALE DEVELOPMENT | CONTRACTOR | SYS/FROG/LOG SUPT MGT | SYSTEMS FNGINEERING | TEST HAROMARE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | GOVERNMENT | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAR | PROTOTYPE TESTS | £ | QATA | 01нЕ |
| * | | N | P7 | 4 | ĸ | w | ~ | م | σ | 10 | 11 | 12 | £. | 71 | 13 | 16 | 17 | 1.6 | J. | 23 | 21 | 25 | 23 | 5 * | 52 | 2 E | ۲. | 82 | 53 | × | 3.1 | 32 | 33 | . *; | b: |
| Caddr | | | | P0/04 | ROTE | ROTE | ROTE | RD/HC | ROTE | ROTE | | RD/0M | ROTE | ROTE | ROTE | RO/HC | RDTE | RDTE | | | RD/OM | ROTE | ROTE | ROTE | RD/MC | ROTE | ROTE | | R0/08 | ROTE | POTE | ROTE | RD/HC | ROTE | P. 3T.5 |

AGE SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLEET
PILOT PROCUCTION PHASE
(F779 SM)

| TOTAL | 707.03 | 27.61 | 18.64 | 14.05 | 1015 | 2.01 | 06.9 | | 2.00 | 9. | • 20 | 1.00 | 4.78 | | 00.4 | 2.5 | 9 | | | 9 | 8.78 | E 4 9 | 5.25 | . 20 | • 0.2 | *9* | *05 | 2.65 | 2.25 | -20 | 20. | 91. | - 92 |
|-----------------|--|---------------------------|--------------|------------|--------------------|--------------------|------------|------------------|---------------------|-------|------------------|-------|------------|--------------------|------------|------------------|---------------------|-------|------------------|-------|-----------|------------|-----------------------|-------------|--------------------|-------------------------|-------|------------|-----------------------|---------|--------------------|-------------------------|-------|
| HISSILE | 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 219165 | 36.6 | 20.00 | 100 | 200 | 0.00 | 70 | •20 | 40. | • 0 5 | 54.0 | 100 | , P7 | | 100 | | 00. | 1 00 | 70.0 | | 200 | 10 J | [VI | 90. | •06 | 00. | 1.53 | 1.49 | 200 | 90• | 20. | 90. |
| SECCND RADAR | F C - 9 F | 6 P. C. | 20°2 | 5, 25 | 044 | - 60 | 2.40 | • 16 | 08. | • 16 | 80. | | 1.00 | • 20 | | | *2* | 80 | 200 | 16 | 40.04 | 1.14 | 64. | 90 • | .01 | • 26 | • 0.1 | • 50 | 72. | | • 01 | • 36 | .31 |
| FIRST RADAR | 50.00 | 10.90 | 20 eg | 9.50 | 9.50 | 0.4 | 3, 5 | . 26 | 1,00 | • 20 | 10 | • 50 | 2,35 | . 25 | 1.00 | 10 | • 30 | .10 | 7. | .20 | 2,05 | 1.43 | 66* | • 10 | . 61 | • 32 | * U.1 | • 62 | 24. | • 10 | • 01 | 8 0. | .03 |
| | INTERNITION OF THE PROPERTY OF | PILOT /LIMITED FRODUCTION | NONRECURRING | CONTRACTOR | SYSTEM/PROGRAM MGT | ADV PRODUCTION ENG | SYSTEM TRE | LOGISTIC SUPPORT | TOOLING ANT IND FAC | DATA | INITIAL TRAINING | OTHER | GOVERNMENT | SYSTEM/PROCRAM MGT | SYSTEM TRE | LOGISTIC SUPPORT | TCOLING AND IND FAC | DATA | INITIAL TRAINING | OTHER | RECURKING | CONTRACTOR | MISSION HANDWARE PROD | ECP/EC0 | 1ST DEST TRANS/PKG | RIF-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION HAFDWARE PROD | ECP/EC0 | 1ST DEST TRANS/PKG | RIF-OUT, INSTALL, INTEG | 01+EP |
| £0. | | 37 | 36 | 39 | :3 \$ | 41 | 24 | P) | 7 | 45 | †¢ | 47 | 0,4 | 64 | 26 | 27 | 25 | 53 | 5.4 | 55 | 2€ | 25 | 5.0 | 5,0 | 9 | 9 | 29 | 63 | † 9 | 9 | 96 | 67 | 9 9 |
| APPRO | | | | | PR/CH | PROC | PRION | PROC | PR/HC | PR/OH | PR/04 | PROC | | PR/CM | PR/CH | PROC | PR/HC | PR/0H | PR/CM | PROC | | | PROC | PROC | PR/CM | PROC | PROC | | PROC | PFOC | PR/CH | PROC | PROC |

363.38

356.47

3.03

3.79

SHIP FLYAMAY COST

ADE SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIF FLEET
FULL PRODUCTION PHASE
(FY79 \$M)

| TOTAL | | 90.569 | 8.78 | 9.49 | 1.12 | 2.46 | • 50 | • 2 • | • 28 | 90. | * | 99• | 00. | 1.99 | 84. | • 17 | • 20 | 12. | 0 | • 30 | •2• | . | 690.88 | 683.18 | 355.86 | 323.73 | • 20 | o . | 1.53 | 1.02 | 40.4 | . 20 | 7.70 | 1.56 | | •20 | 04. | 99• | 44. | 4.16 | . 26 |
|----------------|---|-----------------|--------------|------------|--------------------|------------------------|------------|-------------------|-------|---------------------|----------|------------------|-------|------------|--------------------|------------|--------------------|----------------------|---------------------|-------|------------------|----------|-------------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------------------------|-------------|------------|-----------------------|----------------|------------------------|---------|--------------------|-----------------------|-------------------------|-------|
| HISSILE | 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 683,12 | 10 · | • 68 | .11 | • 25 | . O. O. | • 0 2 | 20.0 | 50° | 90. | 20. | 80. | .20 | .05 | -0.5 | -02 | 20. | 00. | .03 | •05 | 40. | 682,24 | 679.77 | 354.07 | 323,68 | *05 | *0 | 1.10 | .73 | gr. | • 0.2 | 2.47 | 1014 | 90. | 20. | 40. | 24. | •31 | 24. | 20. |
| SECOND | * | 7.35 | 3.51 | 2,71 | 64. | 8 05 • | • 20 | | 30. | 00. | 40. | • 26 | • 32 | 0.0. | . 19 | . 07 | 90. | 80. | 90. | •12 | • 10 | .16 | 40 ° M | 1.52 | *** | 20. | # C • | • 16 | • 19 | .13 | 2.3 | 6 0. | 2.32 | • 19 | . 0.1 | 9 0. | • 16 | | • 06 | 1.66 | D 7 • |
| FIRST RADAR | | 9,19 | \$°.39 | 3, 39 | •56 | 1.23 | • 25 | •10 | • 10 | 00 • | • 42 | . 33 | 01. | 1.0 | • 24 | 60 • | • 10 | • 10 | 90. | • 15 | •12 | • 20 | 4.80 | 1.90 | • 55 | • 03 | •10 | • 20 | *5* | • 16 | 25 | •10 | 2.90 | 42. | • 01 | • 10 | • 20 | • 11 | 10. | 2.08 | • 10 |
| | | FULL PROTUCTION | NONRECURRING | CONTRACTOR | SYSTEM/PROCRAM MGT | PRODUCTION ENGINEERING | SYSTEM TAE | LCGISTICS SUPPORT | | TOOLING AND IND FAC | DATA | INITIAL TRAINING | OTHER | GOVERNMENT | SYSTEM/PROGRAM MGT | SYSTEM TAE | L CGISTICS SUPPORT | OPERATIONAL SITE ACT | TCOLING ANT IND FAC | DATA | INITIAL TRAINING | | PEC UR RING | CONTRACTOR | MISSION HAFDWARE PROD | INITIAL SPARES | SUSTAINING ENGINEERING | ECP/ECO | 1ST DEST TRANS/PKG | SUST TOOL, TEST EQUIP | RIF-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION HAFOWARE PROC | INITIAL SPARES | SUSTAINING ENGINEERING | ECP/ECO | 1ST DEST TRANS/PKG | SUST TOOL, TEST EQUIF | RIF-OUT, INSTALL, INTEG | OTHER |
| | | 9 | 2 | 7 | 7.2 | 7.3 | * | 75 | 76 | 11 | 3. | 79 | 9 | 8.1 | 95 | M7 | 40 | 8 | 86 | 87 | 96 | 5.8 | 96 | 91 | 42 | £6 | 76 | 95 | 96 | 97 | 9.6 | 66 | 100 | 101 | 102 | 103 | 104 | 135 | 106 | 107 | 106 |
| APPRO | | | | | PR/01 | PROC | PR/OH | PROC | PRIME | PRIMC | PR/CH | PR/OM | PROC | | PR/OH | PR/OH | PROC | PR/HC | PR/HC | PR/CH | PR/CH | PROC | | | PROC | PR/OH | PROC | PROC | PR/OH | PROC | PROC | PROC | | PROC | PR/OH | PROC | PROC | PR/OH | PROC | PROC | PROC |

AOL SHIP CLASS - UNIT SHIP COSTS BY EQUIFMENT ELEMENT

LIFE CYCLE COSTS - 10 SHIP FLEET

OFERATION & SUPPORT PLASE

(FY79 \$M)

| APPRO | 100 | | C 4 C 4 C | 34643 | | |
|-------|--------|------------------------------|-----------|---------------|--------------|------------|
| • | # C | COST ELEMENT | KADAK | X A C A X | MISSILE | TOTAL |
| | : | | | | | |
| | 139 0 | OPERATIONS AND SUPPORT PHASE | 14.15 | £.75 | 230.55 | 250.46 |
| | 110 | OFERATIONS | 7.39 | 3.15 | 52.28 | 62.72 |
| | 111 | CONTRACTOR | .57 | . 23 | 42.59 | 43.38 |
| | 112 | CONSUMABLES | 40. | .03 | 42.49 | 45.58 |
| NHO | 113 | OTHER | 05. | • 20 | .10 | 00. |
| | 114 | GOVERNENT | 6.83 | 2.82 | 59•₹ | 19,34 |
| OH/HP | 115 | ORGANIZATIONAL PERSONNEL | 4.50 | 2,25 | 3.30 | 15,75 |
| | 116 | FOUTPMENT LEASEHOLD | 1.00 | 0,5 | .20 | 1.60 |
| DM/HC | 117 | OPERATIONAL FACILITIES | • 30 | • 12 | .15 | .57 |
| | 118 | CONSUMABLES | .03 | .01 | • 14 | •18 |
| | 119 | OTHER | 1.00 | *0. | .20 | 1.24 |
| | 120 | LOGISTIC SUPPORT | 00.09 | 2.40 | 178.12 | 186.52 |
| | 121 | CONTRACTOR | 1.62 | • 65 | .32 | 5.59 |
| | 122 | SYSTEM ILS MANAGEMENT | • 15 | • 0 6 | .03 | *5* |
| NHO | 123 | SYS ENG, FIELD SERVICE | •13 | \$ 0 • | ₽ ∵• | •21 |
| | 124 | SUPFLY | 1.10 | 33. | • 2 2 | 1.76 |
| PP CH | 125 | SPARE PARTS, REPAIR MAT | 1.00 | 01. | .20 | 1.69 |
| NHO | 126 | TRANS AND FACKAGING | .16 | *0 • | • 0.2 | • 16 |
| NHO | 127 | | •14 | φ 7 • | ₩ D • | •25 |
| NHO | 128 | OTHER ILS | • 10 | 70° | 5 O • | •16 |
| | 129 | COVESHENT | 4.38 | 1.75 | 177.80 | 183.93 |
| NHO | 130 | SYSTEM ILS MANAGEMENT | 04. | • 16 | . J.B | *9* |
| | 131 | MAINHENANCE | 1 • 42 | .57 | • 28 | 2.27 |
| OM/MC | 132 | MAINTENANCE FACILITIES | • 72 | • 29 | • 14 | 1.15 |
| GH/HD | 133 | | .69 | .24 | .12 | 96. |
| NHO | 134 | SUPPORT EQUIP MAINT | • 10 | *0 * | • 0 5 | •16 |
| | 135 | SYS ENG, FIELD SERVICE | • 32 | ₩T • | 97. | .51 |
| | 136 | | 1.99 | - P | 17 7 . 32 | 100.11 |
| | 137 | _ | • 30 | .12 | • 36 | 84. |
| | 138 | | • 36 | . 14 | 2 9• | .58 |
| E | 139 | SFARE PARTS, REFAIR HAT | 1.00 | 01. | 177,12 | 178.52 |
| NHO | 140 | INVENTORY ADPIN | .23 | 50. | 50 * | .37 |
| | 141 | TRANS AND FACKAGING | .10 | *0. | •05 | .16 |
| NWO | 142 | DATA AND DECLMENTATION | • 15 | 97. | FO. | •2• |
| | 143 | OTHER ILS | •10 | *** | 20. | •16 |
| | 144 | • | 0.0 | 01 | 00.0 | 00.0 |
| | 145 | • | 94. | • 18 | 63• | *2. |
| | 146 | CONTRACTOR - OTHER | .15 | • 26 | .03 | 42. |
| | 147 | ERNHERT - | .15 | 30.4 | #O. | .24 |
| | 148 | TOTAL | 125.74 | 95.25 | 1129.26 | 1345.25 |

APFRO

ROZE ROZE ROZE ROZHC ROZHC ROZE

ZIPGUN SHIP CLASS - UNIT SHIP COSTS EV EQUIPHENT ELEMENT LIFE CYCLE COSTS - 10 SHIF FLEET R O T & E PHASE (FY79 8H) ROTTE PHASE

ROTTE PHASE

VALIDATION

CONTRACTOR

SYSTEM/PROGRAM HGT

SYSTEM/PROGRAM HGT

SYSTEM/PROGRAM HGT

SYSTEM/PROGRAM HGT

ONTA

ONTA

ONTA

GOVERN-ENT

SYSTEM/PROGRAM HGT

SYSTEM FULL SCALE DEVELCPHENT
CONTRACTOR
SYSTEMS ENGINEERING
TEST HARDWARE FAB
PROTOTIVE TESTS
TOOLING AND IND FAC OTHER GOVERNMENT SYSTEMS ENGLEERING SYSTEMS ENGLEERING TEST HARDWARE FAE PROTOTYPE TESTS TOOLING AND IND FAC DALA **2**0 **2** としょう ちょうしょう ちゅうじょう ちゅうりょう ちゅうりょう ちゅうしょう ちゅうしょう ちゅうしょう ちゅうしょう しょうしょう ちゅうしょう ちゅうしょう ちゅうしょう ちゅうしょう

1469.634 1469.634 14.259 136.640 14.259 14.259 14.36 15.36 16.36 1

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ROZON ROTE ROTE ROZHC ROZHC ROZE

ZIPGUN SHIP CLASS - UNIT SHIP COSTS 97 EQUIPMENT ELEMENT LIFE CYCLE COSTS - 10 SHIP FLEET PILOT PRODUCTION PHASE (FY79 SH)

| | | | FIRST | SECOND | |
|----------|-----------|--------------------------|--------|---|--------|
| APPRO | 80 | COST ELEMENT | RADAR | FADAR | TOTAL |
| | ! ? | | | 0.00 | 6A. 4A |
| | 0 1 | | 60007 | 7700 | |
| | 34 | PILOT/LIMITED FRODUCTION | 10.90 | 26.16 | 37.06 |
| | 38 | NONRECURRING | 8.85 | 21.24 | 30.05 |
| | 35 | CONTRACTOR | 6 • 51 | 15.60 | 22.18 |
| PR/CM | 7 | SYSTEM/PROGRAM MGT | • 50 | 1.20 | 1.70 |
| PROC | 7 | ADV PRODUCTION ENG | 1.00 | 2.40 | 3.40 |
| PR/OH | 45 | SYSTEM TRE | 3.60 | 7.20 | 10.20 |
| PROC | 4 | LOGISTIC SUPPORT | •20 | 87. | 99. |
| PR/HC | 3 | TCOLING AND IND FAC | 1.00 | 2 • 4 0 | 3.40 |
| PR/OH | 3 | DATA | • 20 | 9.7 | .68 |
| PRION | 9 | INITIAL TPAINING | .10 | *5* | 46. |
| PROC | 7.9 | OTHER | 05 | 1.20 | 1.70 |
| <u>!</u> | 4 | GOVERNMENT | 2,35 | 40.00 | 7.99 |
| HU/00 | 4 | CYCTEN/PROCERM MGT | 52. | | 28. |
| HO/04 | ď | CANTER TER | | 201.6 | 04.6 |
| 0000 | | TOURNEY OF DEADLE | | 40. | 40 |
| DA / 00 | | CAR CAL CAS GAT COT | | 62. | 1.02 |
| PD/GP | . Kr | 0.414 | £ . | 1.00 | 46.4 |
| HU/dd | , r | TATTAL TOATAING | | 96 | 15.35 |
| Penc | 2 1 | | 22 | 9 4 | *** |
|) | 2 | | 2,35 | | 26.9 |
| | 5.7 | CONTRACTOR | 1.43 | 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C | 4 000 |
| PROC | . 60 | MISSION HARDWARE PROD | 66 | 2.37 | |
| PROC | 5 | ECF/ECO | .10 | 3.5 | 4000 |
| PR/OH | 9 | 1ST DEST TRANS/PKG | 10° | 200 | MO. |
| PROC | 61 | RIP-OUT, INSTALL, INTEG | •32 | 7.40 | 1.09 |
| PROC | 62 | OTHER | £.0.0 | 20. | .03 |
| | 63 | GOVERNMENT | 29* | 1.49 | 2.12 |
| PROC | 49 | MISSION HAFOWARE PROC | 24. | 1.01 | 1.44 |
| PROC | 9 | E CP/ECO | • 10 | 45.4 | 400 |
| PRIOH | 99 | 1ST DEST TFANS/PKG | .01 | •02 | €0• |
| PROC | 67 | RIF-OUT, INSTALL, INTEG | 80. | •19 | .27 |
| PROC | 99 | OTHER | • 01 | •02 | £0. |
| | | | | | |

12.90

9.10

3.79

SHIP FLYAHAY COST

ZIPGUN SHIP CLASS - UNIT SHIP COSTS BY EQUIPMENT ELEMENT LIFE CYCLE COSTS - 10 SHIP FLEET FULL PRODUCTION PHASE 1FY79 8N)

| **************** | | | JA 101 | | 31.25 | 14.92 | 11.53 | 25.1 | A. 0.0 | 1 d | 60. | *** | #p. | 50. | 1043 | 1.12 | 1.36 | 3,39 | . 8. | 66. | 45 | | | 3 . | 16. | 77 | | 16.33 | 94.9 | 1.00 | &C.* | ₹ % • | 99• | -8- | • 54 | 1.77 | 470 | 4.67 | | 400 | | *** | 0 | 95. | •5• | 7.07 | ₽M+ |
|------------------|--------|-----------------|--------------|------------|------------------------|----------------------|----------------------------|------|--------------------|----------------------|----------------------|-------|------------------|------|----------|--------------------|------------------|------|--|----------------------|---------------------|-------------|------------------|------|-----------|------------|-----------------------|----------------|------------------|---------------------|-------------------|----------------|--------------------------|--------|-------------|------|--|------|-----------------------|-------------|--------------------|-----------------------|-----------------------|--------|------|--------------|-----|
| | SECONG | FADAR | ***** | 22.06 | 10.53 | 41.45 | . J. | 1000 | 66.00 | 50. | 42. | •5• | 00. | 1.01 | .79 | , se o | 6 K 6 C | | | 170 | *> | *2 • | 00· | • 36 | 62. | 93. | 11.53 | 4.56 | 1,32 | 20. | *5* | 40 | to the | 200 | 1,25 | 372 | 6.97 | 44 | | 77.0 | *Z* | 10.7° | 425 | -17 | 86.4 | 3 ≥ • | |
| 10014 | 34043 | | 0, 0 | 05.4 | 62 2 | 54 | 0.00 | 1,63 | • 52 | .10 | •13 | Ωr • | 2.4 | - 33 | 67 | | 7 6 | #2¢ | 60. | .19 | •13 | 69. | \$1, | • 12 | 200 | 000 47 | 1.91 | | 20" |) - | 27. | 75. | 44. | 24 | 300 | 2.04 | | *>* | • 11 | •16 | .20 | 11.0 | F. 6. | 80.00 | | | |
| | | FULL PROCUCTION | NONRECURRING | CONTRACTOR | NASTEM PROCESS AND LOS | PERSONAL TRANSPORTER | SKINDANTON DATE OF THE OWN | | TADPORT SUBSTITUTE | OPERATIONAL SITE ACT | T COLING AND IND FAL | | INITIAL TRATETAC | | COVERNER | ATT. STOLEGONELLYN | 一つま にえなった。 こうしょく | | POST OF CORPORT | UPERALIONAL SITE ACT | TOULING AND IND PAC | | INITIAL TRAIFING | | からつじます」とら | CONTRACTOR | MISSION HARDHAUR DESC | INITIAL SPARES | SCOTATATE FACTOR | ECF/ECO ENGINEERANG | 1ST DEST TEAMSONS | SENT TOOL TOOL | P TO POST INCHASE TO THE | OT TEN | COKERNATIVE | 3 | TOTAL STREETS TAILED TO THE TA | | COLUMNING ENGINEERING | L C / L C O | 1ST DEST TRANS/PKG | SUST TOOL, TEST FOILE | SIF-OUT INSTALL TARKS | 011152 | | | |
| PO ROM | ; | o. 9 | ر د | 7. | | | | | 7. | | | | <u>ج</u> : | 10 · | | | 33 | 34 | 40 10 10 10 10 10 10 10 10 10 10 10 10 10 | 4 |) e | | 0 0 | , | <u>,</u> | | 25 | P) | * | ر م | 96 | 37 | 3.8 | o's | 130 | 101 | 192 | 1.33 | 114 | | 1 | 200 | 10/ | 1.78 | | | |
| APPRO | | | | 6 | 5 | 2024 | PRIOR | PROC | PR/NC | CH/AG | PRIOR | 70/00 | 200 | 2 | | WO / X | 10/2d | PROC | PR/HC | PR/HC | PR/CH | PR/08 | 2000 | 2 | | 0000 | 200 | 2000 | 2000 | 200 | 7. C. | 202 | PROC | 2024 | | 302 | 10 X | PROC | PROC | PR/ON | PPOC | 200 | 2000 | אמני | | | |

ZIPGUN SHIP CLASS - UNIT SHIF COSTS BY EQUIPHENT ELEMENT LIFE CYCLE COSTS - 10 SHIF FLEET OPERATION & SUPPORT PHASE (FY79 %F)

| APPRO | | LEMENT | RADAR | RADAR | TOTAL |
|-------|-------|-----------------------------|--------------|--------|----------------|
| | | | B | | 0 04 |
| | | OPERATIONS AND SUPPCE PHASE | 14.19 | 70 27 | 14.40 14.40 |
| | 110 | OFERALLERS | F0. | #2*CT | |
| | 111 | |)60 | 0101 | 707 |
| ~ | 112 | CONSUMABLES | * 0 • | .13 | 2 |
| Z O | 113 | OTHER | 05* | 1.00 | 1.50 |
| | 114 | GOVERNMENT | 6.83 | 14.11 | 20.94 |
| OH/HP | 115 | ORGANIZATIONAL PERSONNEL | 4.50 | 11,25 | 15,75 |
| 7 | 116 | | 69-1 | 2.00 | 3.00 |
| 1 | | OB102440181 FACT17150 | | | |
| 2 - | | | | | 500 |
| 2 2 2 | 011 | | | | 1.20 |
| - | 119 | | Doel | 02. | |
| | 120 | LOGISTIC SUPPORT | 00.0 | 16.00 | |
| | 121 | | 1.62 | 3.64 | 00.1 |
| ZHO | 122 | _ | . 15 | • 30 | |
| NHO | 123 | SYS ENG, FIELD SERVICE | • 13 | •26 | 6 K • |
| | 124 | SUFFLY | 1.10 | 2.20 | 3,30 |
| PR/ON | 125 | SPARE PARTS, REPAIR MAT | 1,00 | 2.00 | 3.00 |
| NHO | 126 | TEANS AND FACKAGING | • 10 | •20 | Ñ. |
| NHO | 127 | DATA AND DOCUMENTALION | 41.0 | .28 | 24.0 |
| Z | 128 | | 01. | • 50 | 92. |
| | 120 | FXLXX GL7CU | 40 F 47 | 8.76 | 43.54 |
| 220 |) E | CANTEN TO MANAGEMENT | 0.4 | | 1.20 |
| | 2 4 | | 29-1 | 2.84 | 4.26 |
| OM/HC | 1 3 2 | SELLITION RESIDENTAL | .72 | 1.044 | 2.16 |
| 04/40 | 7 | TANACO MONOCATAL CA | 19* | 1.20 | 1.84 |
| | 7 | CHOODE CO. TO KATE! | | | em. |
| 2 | # (C | _ | | 17 | , |
| ž E | 1.59 | STS ENG FIELD SERVICE | 26. | | 20. |
| | 136 | | 56.44 1 | 00.00 | |
| OM/HP | 137 | | • 30 | 0.00 | 36+ |
| DH/HC | 136 | SUPPLY FACILITIES | • 36 | • 72 | 1.06 |
| PR/OH | 139 | SPARE PARTS, REPAIR MAT | 00.1 | 2.04 | G. P7 |
| NHO | 143 | INVENTORY ADMIN | • 23 | 94. | 69. |
| MMO | 141 | TRANS AND FACKAGING | • 10 | •20 | 930 |
| NHO | 142 | | 21.5 | 98. | . 45 |
| - | 7 | " | 10 | .20 | .30 |
| _ | 771 | CONTUBEL TOBINING | 0.00 | 00.0 | 00.0 |
| , , | 7 7 | ٠ | 94 | 26. | 600 at |
| 2 | 47.5 | • | | es ma | * |
| | 1 4 | | | | |
| - | | CKANCA | 67. | 10:080 | 40.704 |
| | 7 40 | | */* C2T | 434303 | |

The state of the s

BOOPER SHIP CLASS - UNIT SHIP COSTS BY ECUIPMENT ELEMENT
LIFE CYCLE COSTS - 10 SHIP FLEET
R D T L E FHASE
(FY79 SH)

| TOTAL | | 239.11 | 36,30 | 13.46 | 9. | 2.40 | 54.0 | 1.20 | | 97. | 53 | 24.84 | • · | 2.40 | 20 • 28 | 1.32 | •15 | •12 | .12 | 260.60 | 228.91 | 9 | 1.86 | 225,38 | 0 £ | 7 | 91. | . 35 | 31.89 | 41. | *** | 30.10 | •15 | • 36 | •15 | •10 |
|----------------|---|-------------|------------|------------|-------|---------------------|-------------------|-----------------|-----------------------|------|-------|------------|--------------------|---------------------|-------------------|-----------------|-----------------------|-------|-------|------------------------|------------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|---------|-----------------------|---------------------|-------------------|-----------------|---------------------|------|-------|
| MISSILE | | 207.61 | 11,31 | 3.77 | .10 | 04. | 2,83 | • 20 | *0 * | .03 | •15 | 7.54 | £0. | 07. | 6.78 | •25 | •05 | • 0.2 | • 0 5 | 196,29 | 185.92 | 80. | • 31 | 185,28 | •10 | 20. | £0. | • 06 | 10.37 | • 0 2 | 41. | 10.05 | • 0% | 90. | -0.5 | . O. |
| FIRST RADAR | | 91.50 | 56.99 | 69•6 | 050 | 2.00 | 5.63 | 1.00 | *3* | • 15 | 90 • | 17 • 30 | 07. | 2.00 | 13.50 | 1.10 | • 10 | •10 | •10 | 64.51 | 45.99 | 939 | 1.55 | 46.10 | • 50 | • 37 | 41. | • 56 | 21,52 | •12 | 0.20 | 20.05 | •13 | •30 | •10 | • 15 |
| COST ELEMENT | | RUTLE PHASE | VALIDATION | CONTRACTOR | | SYSTEMS ENGINEERING | TEST HARDMARE FAB | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | GOVERNMENT | SYSTEM/PROGFAM MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAE | DEVELOPMENT TRE | INDUSTRIAL FACILITIES | DATA | OTHER | FULL SCALE DEVELOPMENT | CONTRACTOR | SYS/PROG/LOG SUPT MGT | SYSTEMS ENGINEERING | TEST HARDWAPE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | DATA | OTHER | GOVERNY | SYS/PROG/LCG SLPT MGT | SYSTEMS ENGINEERING | TEST HARDWARE FAB | PROTOTYPE TESTS | TOOLING AND IND FAC | OATA | OTHER |
| F. | ; | ** | ۲. | ~ | 4 | ľ | ¥. | 4 | u. | o, | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 11 | 18 | 1,5 | ် (| 21 | 22 | 23 | 54 | 5 | 36 | 27 | 2.8 | 2 | 36 | 31 | 32 | 33 | 34 | 36 |
| APFRO | | | | | M0/04 | EDTE | ROTE | 20TE | 2D/HC | 207E | ROTE | | *2/Q | ROTE | ROTE | ROTE | 30/FC | 20TE | TOTE | | | #0/0H | ROTE | ROTE | ROTE | SD/MC | ROTE | ROTE | | HO /02 | 20TF | ROTE | 2DT E | SD/MC | 20TE | OTE |

BOOPER SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIP FLEET
FILOT FFODUCTION PHASE
(FYT9 BM)

| TOT AL | 7 11.19 | 18.89 | 11.75 | 6.85 | .75 | 1.20 | 6 • 5 0 | •5• | 1.20 | *S* | •15 | 99. | 2.90 | • 38 | 1.20 | •15 | .36 | •12 | 0 1 . | +5+ | 7.14 | 66** | 4.46 | .12 | 10. | .38 | •01 | 2.15 | 1,91 | •12 | .04 | .18 | •01 | 360.26 |
|---------|--|--------------------------|---------------|------------|--------------------|--------------------|----------------|-------------------|-------|------------|------------------|-------|------------|--------------------|------------|------------------|---------------------|-------|------------------|-------|-----------|------------|-----------------------|---------|--------------------|-------------------------|-------|------------|-----------------------|----------|--------------------|-------------------------|-------|-------------------|
| MISSILE | | 7 • 99 | 2*40 | 2,35 | •25 | •20 | 1.50 | 40° | .20 | 30. | • 0.2 | .10 | •55 | .13 | •20 | • 0 2 | 90. | • 02 | €0. | 70. | 5.09 | 3.56 | 3.468 | •02 | 00. | 90• | 00• | 1.53 | 1.49 | • 0 2 | 60. | • 0.5 | 90• | 356.47 |
| FIRST | 60400 | 10.90 | 8 • 85 | 6.53 | • 50 | 1.00 | 3.00 | •50 | 1.0 | • 20 | •10 | .51 | 2,35 | •52 | 1.00 | •10 | • 30 | •10 | 07. | • 20 | 2 • 05 | 1.43 | 56 • | • 10 | 10. | • 32 | T.) * | .62 | .42 | •10 | 16. | 80. | • 01 | 3.79 |
| COST | TOTAL STREET OF THE PROPERTY O | FILOT/LIMITED PFCDUCTION | NONR! CURRING | CONTRACTOR | SYSTEM/PROGRAM MGT | ADV PRODUCTION ENG | SYSTEM TEE | L CGISTIC SUPPORT | | | INITIAL TFAINING | を出土して | GOVEFNMENT | SYSTEM/PROGRAM MGT | SYSTEM TAF | LCGISTIC SUPPOFT | TCCLING AND IND FAC | | INITIAL TRAINING | OTHER | FECURFING | CONTFACTOR | MISSION HAFONARE PROD | ECP/EC0 | 1ST DEST TFANS/PKG | RIF-OUT, INSTALL, INTEG | OTHER | GOVERNMENT | MISSION FAFORAKE PROE | Ł CP/ECO | 1ST DEST TFANS/PKG | RIF-OUT, INSTALL, INTEG | 01HEP | SHIP FLYAMAY COST |
| _ | | | 92 | 30 | c, | , | 7 4 | M \$ | 47 | ÷ | 46 | 7 | e t | 3 | 5 | 51 | 25 | 53 | 54 | 26 | 5 E | 23 | 5.0 | 5.0 | ç: Q | 51 | 9 | P) | 90 | 9 | 56 | 29 | 9 | •• |
| APPRO | | | | | PR/CH | PROC | PR/CH | PROC | FR/MC | PR/OH | PR/OH | PROC | | PR/CM | PRICH | PROC | PR/MC | PR/CH | PR/OH | PROC | | | PROC | PROC | PR/CH | PROC | PROC | | PROC | PROC | PR/CM | PROC | PROC | |

BOOMER SHIP CLASS - UNIT SHIP COSTS BY EQUIPHENT ELEMENT
LIFE CYCLE COSTS - 10 SHIP FLET
FULL FRODUCTION FRASE
(FYZO SH)

| | ROM COST ELEMENT | FIRST PADAR | HISSICE | TOTAL |
|---------|-----------------------------|----------------|---|---------------|
| | | 100 | 0 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + | 15.49.31 |
| | ר כי | 6249 | 1 60 | 5.27 |
| | 71 CONTRACTOR | 3,39 | , ep | 10.4 |
| PR/OH | | • 56 | 11. | 19. |
| PROC | 73 FPODUCTION ENGINEERING | 1.23 | •25 | 1.48 |
| PR/CM | | • 25 | •05 | .30 |
| PROC | | • 10 | • 0.2 | •12 |
| PR/HC | OFFRAT | • 10 | • 02 | •12 |
| PRIMC | 77 TOOLING AND IND FAC | 0e∙• | 00• | 00. |
| PR/CH | DATA | 24. | 80. | • 50 |
| Σ | 79 INITIAL TRAINING | • 33 | 20. | 0.4. |
| | | 07. | 80. | 94. |
| | 09 | 1.00 | •20 | 1.20 |
| PRION | | *5* | • 02 | 62. |
| PR/OH | | 62. | • 0 5 | .10 |
| PROC | | •10 | •05 | •12 |
| PR/HC | BE OPERATIONAL SITE ACT | •10 | -02 | •12 |
| PQ/HC | 86 TCOLING AND IND FAC | 00. | 90. | 00• |
| PRION | DATA | • 15 | £0. | .18 |
| PR/OH | | •12 | • 0.5 | 9 F. • |
| | | .5* | *** | • 54 |
| | SECURATING | 08.4 | 682.24 | 687.04 |
| | ວ | 1,00 | 22.629 | 681.66 |
| | | \$5. | 354.07 | 354.62 |
| PRION | | •13 | 323.68 | 323.71 |
| | 94 SUSTAINING ENGINEERING | • 10 | •05 | •12 |
| | | • 20 | *0. | *2* |
| PP/CH | | • 24 | 1.10 | 1.34 |
| | 37 SUST TOOL, TEST EQUIP | •16 | •73 | 54. |
| | | •52 | •10 | *62 |
| FROC | | •10 | • 0 5 | •12 |
| | 10C GOVEFNMENT | 2.90 | 2.47 | 5.36 |
| PROC 1 | 111 MISSION HARDWAKE PROD | *5 * | 1.14 | 1.38 |
| | | .01 | 90. | 20. |
| | | • 10 | •02 | .12 |
| | | • 20 | *0. | *2* |
| PR/OM 1 | | •11 | 64. | 85. |
| _ | | 20. | .31 | •38 |
| 7 | 107 RIF-OUT, INSTALL, INTEG | 2.08 | • 42 | 2.50 |
| | | | | |

The state of the s

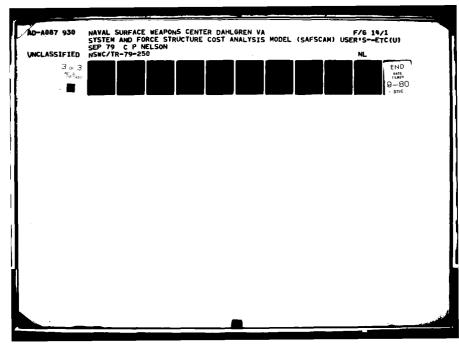
EUUMER SHIP CLASS - UNIT SHIP COSTS EY EQUIPMENT CLEMENT LIFE CYCLE COSTS - 10 SHIF FLEET CFEATION & SUPFORT PHASE (FY79 SH)

| APPRO | | T SLEMENT | FIRST Radar | MISSILE | TOTAL |
|------------------|-------------------|--------------------------------|---|----------------|-------------|
| | | CEFFERITORS AND SUPPORT PERSON | 111111111111111111111111111111111111111 | 461110 | 475.26 |
| | 11 | CFERATIONS | 7 • 39 | 104.55 | 111.95 |
| | 111 | CONTRACTOR | 5.5° | 85.418 | 45.74 |
| 210 | 112 | CONSUMABLES | 20. | 86.48 | 85.04 |
| 2 | 113 | CTHER | J 5 * | .26 | 0. |
| | 114 | COVERNMENT | 6.33 | 19.37 | 26.20 |
| 9H/HD | 115 | CRGANIZATIONAL PLRSONNEL | ₽.€.₽.G | 18.30 | 22.50 |
| z | 116 | FOUTFMENT LE ASCHOLD | 1.30 | 0 * • | 1.40 |
| DH/HC | 117 | OPF GATIONAL FACILITIES | JE • | • 30 | 9. |
| Z | 116 | CONSCIMBBLES | en. | .27 | 0.00 |
| z | 119 | の作出作品 | 1+33 | 97. | 9.4 |
| | 15) | LCCISTIC SUFPORT | ຸ ເມ•9 | 356.25 | 362.25 |
| | 121 | | 1.62 | • 65 | 2.27 |
| Z T O | 122 | SYSTEM ILS MANAGEMENT | • 15 | 90• | . 21 |
| z | 123 | 6, F.I | .13 | • 0 • | 870 |
| | 124 | SUPFL∀ | 1.10 | 3 3 . . | 1.54 |
| FRICH | 125 | STARE PARTS, REPAIR MAT | 1.03 | 01. | 07.4 |
| ZVO | 12F | TEANS AND FACKAGING | .13 | 70. | •1 • |
| ZEO | 127 | CATA AND OCCUMENTATION | .14 | 90. | • 50 |
| z. | 126 | OTHER ILS | • 10 | 30. | 41. |
| | 125 | | t(£) = +j | 355.60 | 359.98 |
| ZZO | 130 | SYSTEM ILS MANAGEMENT | U , * | .16 | • 56 |
| | 131 | MAINTENANCE | 1 • 42 | .57 | 1.9 |
| OH/HC | 132 | MAINTENANCE FACILITIES | 21. | \$5. | 1.01 |
| 0×/×0 | //) #-) #-4 | PAINTENANCE PERSONNEL | ça• | .24 | 78. |
| ₹ 2 2 2 | 1 34 | SUPPORT EQUIF MAINT | •13 | 70. | *T. |
| Z | 13.5 | SYS FNG, FIELD SERVICE | .32 | .13 | |
| | 116 | | 1.99 | 354.65 | 356.64 |
| CH/HD | 1 37 | SUFPLY PERSONNEL | • 30 | .12 | • 42 |
| Ž. | 136 | SUPPLY FACILITIES | • 36 | .14 | 95. |
| P2/CH | 5. *1 | | 1.0 | 354.25 | 355.25 |
| Z, | • | | £2* | 60. | • 32 |
| z | 141 | TEANS AND PACKAGING | • 19 | * 3 4 | *** |
| z | 142 | CATA AND SOCUMENTATION | .15 | 90. | .21 |
| Z | 7.7 | OTHER ILS | •16 | 70. | 41. |
| z | 7 + | | 00.0 | ₽ O • O | 00.0 |
| ž | 145 | 1 | 97. | • 1.3 | *9* |
| N N | 146 | - 01 | • 15 | 90. | •21 |
| ž | 1+7 | L LABERT | • 15 | 90* | 12. |
| | 148 | TCT AL | 125.74 | 1359.81 | 1485,56 |

SHIP CLASS GCST SUMMAN LIFE CYCLE COSTS - 10 SHIP FLEET F. O. T. W. PHASE (F79 &H)

SLCCH TESTCASE DATA

| APFE.) | <u>.</u> | COST ELEMENT | JU I | FFX | 00-963 | ACE | NOSdIZ | PCOMER | TOTAL |
|--------|----------------|--|------------|-------------|--------|----------|-------------|--------|------------|
| : | ; • | 14114141111111111111111111111111111111 | 676 4 % | 0 4 7 4 0 4 | 00000 | 7.35. 05 | * C . C G G | 598.21 | 1675.27 |
| | 4 0 | NCT LOCK TOO | 24.44 | \$ C * C D | 43.77 | 110.17 | 154.68 | 76.61 | 6.50 . 8 . |
| | , ~ | | 21.14 | 24.47 | 12.62 | 32.75 | 36.47 | 26.93 | 163,95 |
| I | t. | TOW MARGORAN TRYCO | 8.2 | 4 | • 5.8 | 1,36 | 89.1 | 1.20 | 6.80 |
| ROTE | 4. | SYSTEMS ENGINEEPING | 95.5 | 09.0 | 3.60 | 6.10 | 13,60 | 4.80 | 40.03 |
| | Ψ | TEST HAPDWAFE FAR | 11,28 | 22,55 | 5.63 | 16.90 | 11,25 | 16.90 | 84.50 |
| ., | ^ | DEVELOPMENT TRE | 2,20 | 2.80 | 1.80 | 0 J • 17 | 6.80 | 2.40 | 20.30 |
| Ļ | ŗŲ | INDUSTRIAL FACILITIES | 51. | 96. | • E1 | 1.36 | 2,31 | .82 | 6.80 |
| | σ | DATA | .33 | 545 | .27 | 99. | 1.32 | •36 | 3.00 |
| | 10 | OTHER | 4. | .75 | .14 | 15. | .51 | . 4 | 2.85 |
| | 7 | COVERNENT | 46.23 | 6.4.76 | 31.15 | 77.38 | 117.71 | 39.64 | 386.92 |
| Σ | 12 | SYSTEM/PROGERM MGT | 88. | 1.12 | .72 | 1.60 | 2,72 | •9€ | 8.40 |
| ROTE | P) | SYSTEMS ENGINEERING | 01.1 | 5.60 | 3.60 | 33.8 | 13.60 | 1.0A | 00.04 |
| | 1.4 | TEST HARDWARE FAB | 37.97 | 54.12 | 24.31 | 65.18 | 91.87 | 46.56 | 310.92 |
| | 1 | DEVELOPMENT ILE | 2.42 | (U) | 1.38 | 1.40 | 7.48 | 5.64 | 22.00 |
| õ | 16 | INGUSTRIAL FACILITIES | .22 | .28 | . 18 | 07. | 69 | 42. | 2.10 |
| | 1.7 | a ta c | • 25 | • 28 | . 18 | 9. | • 68 | • 54 | 2.00 |
| 1.4 | 1.8 | CTHER | .22 | • 28 | .18 | 37. | .68 | 42. | 2.00 |
| | 6 | FULL SCALE DEVELCAMENT | 568.73 | 914,19 | 116.15 | 624.88 | 438,85 | 521.60 | 3124.40 |
| | | CONTRACTOR | 469.54 | 654.65 | 77.40 | 526.64 | 292.45 | 457.82 | 2633.20 |
| E | 2.1 | SYS ZFROGZLOG SUPT 46T | 78. | 1.06 | • 58 | 1.52 | 2,58 | .91 | 7.60 |
| | 2.5 | SYSTEMS FNGINEERING | 3.41 | 4.34 | 2.19 | €.20 | 10.54 | 3.72 | 31.00 |
| | 23 | TEST HARLWARE FAE | 442,75 | 821,33 | 72.20 | 514.95 | 272,80 | 456.75 | 2574.76 |
| | 7.5 | PPOTCTYPE TESTS | • 56 | () a. | • 36 | • 92 | 1,36 | 09. | 4.60 |
| ပ္ | \$2 | TOOLING AND IND FAC | 0 × • | 1.02 | • 56 | 1.46 | 2.48 | .88 | 7.30 |
| | 3 E | DATA | • 31) | .38 | .24 | • 54 | •92 | .32 | 2.70 |
| 160 | 23 | CTHES | .58 | 47. | 24. | 1.05 | 1.77 | .63 | 5.24 |
| | 2.8 | GOVEFNMENT | 54.49 | 84.54 | 38.75 | 56.24 | 146.40 | 63.79 | 491.20 |
| 5 | 5. 2. | SYSZPRCGZLCG SUPT MGT | • 26 | 48. | •25 | 27. | • 82 | •56 | 2.48 |
| | ; M | SYSTEMS FNGINEERING | 1.54 | 1.96 | 1.26 | 2•8€ | 4.76 | 1.68 | 14.00 |
| | 3.1 | TEST HARDWARE FAB | 56,20 | 8.633 | 36.10 | 52.30 | 136.40 | 60.20 | 461.50 |
| | 32 | FPOTOTYPE TESTS | • 28 | 0,5 | •18 | 94. | .68 | .30 | 2.30 |
| 877 PC | 33 | TOOLING AND IND FAC | 99* | 4.80 | ,54 | 1.20 | 5.04 | .72 | 9.00 |
| | 34 | CATA | *55 | • 28 | . 18 | 07. | 999 | •24 | 2.00 |
| | | | ; | | • | • | | ì | |



SHIP CLASS COST SUPHARY LIFE CYCLE COSTS - 10 SHIF FLEET PILOT PRODUCTION PHASE (FY79 SM)

| | НОС | FFX | 00-963 | AOE | ZIPGUN | BOOKER | TOTAL |
|--------------------------|---------|---------|--------|---------|--------|-------------|---------|
| | 1618.37 | 2864.59 | 36.16 | 1454.63 | 136.61 | 1422.39 | 7272.65 |
| PILOTALINITED FRODUCTION | 35.60 | 53.75 | 19.62 | 55.22 | 74-12 | 37.78 | 276.08 |
| | 21.72 | 29.28 | 15.93 | 37.65 | 60.16 | 23.49 | 188.25 |
| CONTF ACTOR | 10.40 | 22.40 | 11.70 | 28.10 | 44.20 | 17.70 | 140.58 |
| SYSTEM/PROGRAM MGT | 1.40 | 2.00 | 96* | 2.30 | 3.40 | 1.50 | 11.50 |
| ADV PRODUCTION ENG | 2.20 | 2.00 | 1.50 | 9) •, | 6.80 | 2.40 | 20.00 |
| SYSTEM TRE | 0 + • 6 | 12,00 | 5 • 40 | 13.80 | 20.40 | 90.6 | 69.00 |
| LOGISTIC SUPFORT | *** | • 56 | • 36 | 08. | 1.36 | 4. | 40.4 |
| TOOLING ANT IND FAC | 2.20 | 2.60 | 1.80 | 33 • 4 | 6.80 | 2.40 | 20.00 |
| DATA | 7. | • 56 | ,36 | 99 | 1.36 | * | 4.00 |
| INITIAL TRAIPING | •22 | •26 | •18 | 0.7. | 99. | .24 | 2.00 |
| OTHER | 1.10 | 1.40 | 06. | 2.00 | 3.40 | 1.20 | 10.08 |
| GOVERNMENT | 5.32 | 6.86 | 4.23 | 9.55 | 15.98 | 5.46 | 47.75 |
| SYSTEM/PROGRAM MGT | 0.20 | 1.00 | .45 | 1.15 | 1.70 | .75 | 5.15 |
| SYSTEM TRE | 2.20 | 2.80 | 1.80 | 90.4 | 6.80 | 2.40 | 20.00 |
| LOGISTIC SUPPORT | •25 | • 28 | •18 | 9. | • 68 | .24 | 2.00 |
| TCOLING ANC IND FAC | •66 | 70. | *5. | 1.20 | 2°04 | .72 | 6.00 |
| DATA | •25 | •56 | •18 | 0.4. | .68 | .24 | 2.88 |
| INITIAL TRAIPING | 88. | 1.12 | .72 | 1.60 | 2,12 | 96. | 8.00 |
| OTHER | *** | • 56 | • 36 | 9. | 1.36 | 84. | 4.00 |
| RECURRING | 13.88 | 24.47 | 3,69 | 17.57 | 13.94 | 14,29 | 67.63 |
| CONTFACTOR | 9.70 | 17.11 | 2.57 | 12.26 | 9.70 | 96.6 | 61.32 |
| MISSION HAFOWARE PRO | ٥ | 15.88 | 1.78 | 10.50 | 6.71 | 6.93 | 52,52 |
| E CF/ECO | •25 | • 28 | •19 | 9. | • 68 | 124 | 2.00 |
| 1ST DEST TRANS/PKG | | 10° | 36. | *5 | • 00 | :: | •20 |
| RIF-OUT, INSTALL, INTEG | | 96. | 58 | 1.20 | 2.18 | .77 | 6.48 |
| | . 32 | £0. | • 05 | 45. | •04 | . 0° | •20 |
| GOVERNMENT | 4.18 | 7.36 | 1.12 | 5.30 | 4.24 | 4.31 | 26.51 |
| MISSION HAFDTARE PROC | 3.74 | 6.80 | • 76 | 4.50 | 2.88 | 3.83 | 22.51 |
| ECF/EC0 | •25 | •28 | 91. | 04. | 990 | \$2° | 2.00 |
| 1ST OEST TRANS/PKG | 20. | F 0. | 200 | 30· | -01 | • 62 | .20 |
| RIP-OUT, INSTALL, INTEG | | • 25 | .14 | • 32 | •54 | •19 | 1.60 |
| OTHER | • 0.2 | ₽0• | • 12 | 70. | .07 | .02 | .28 |
| | 1 | | | | | | |

SHIP CLASS COST SUPMARY LIFE CYCLF COSTS - 10 SHIP FLEET FULL FRODUCTION PHASE (FY79 8M)

| APPRO | #0# | COST ELEMENT | ЭО Н | ¥ | 00-963 | 300 | ZIPGUN | ECCNER | TOTAL |
|-------------|------|-------------------------|---------|---------|-------------|----------|--------|---------|----------|
| | 9 | FULL PRODUCTION | 1382.77 | 2756.84 | 16.54 | 1359.31 | 62.49 | 1384.61 | 6996.57 |
| | 2 | NON RECURRENCE | 9.65 | 12,29 | 7 . 5 | 17.55 | 29.84 | 10.53 | 87.76 |
| | 7.1 | CONTRACTOR | 7.46 | 9.50 | 6.10 | 13.57 | 23.06 | 8.14 | 67.63 |
| #0/\$ | 72 | SYSTEM/PROGRAM MGT | 1.23 | 1.57 | 1001 | 2.24 | 3.61 | 1.34 | 11.20 |
| 200 | 73 | PRODUCTION ENGINEERING | 2.71 | 44.60 | 2.21 | 4.92 | 9.36 | 2.95 | 24.68 |
| ₹/0H | 2 | SYSTEM TIE | •55 | 0.20 | .45 | 1.00 | 1.70 | 99* | 5.00 |
| ROC | 75 | LOGISTICS SUFFORT | .22 | .28 | •16 | 4 | 99. | •24 | 2.00 |
| ž/FC | 9.2 | OPERATIONAL SITE ACT | •25 | .28 | •10 | 97. | 99 | •2• | 2.11 |
| 7/ ¥C | 11 | TCOLING AND NAD FAC | 00. | 00. | 900 | .01 | 10. | 00. | |
| £/ C# | 7.8 | DATA | •92 | 1.16 | • 16 | 1.68 | 2.06 | 1.01 | 04.0 |
| ₹ 207 | 49 | INITIAL TRAIP.NG | .73 | .92 | •59 | 1. 12 | 2.24 | .79 | 6.68 |
| ROC | 80 | OTHER | 99. | 1.12 | .72 | 1.60 | 2.72 | 96• | 00.0 |
| | 93 | GOVERNMENT | 2.19 | 2,79 | 1,79 | 3,99 | 6.78 | 2,39 | 19.93 |
| A/04 | 82 | SYSTEM/PROGRAM MGT | .53 | .67 | Et. | 96. | 1.63 | .58 | 4.80 |
| FO 2 | 83 | SYSTEM TRE | •19 | • 2 4 | .16 | . 34 | .59 | .21 | 1.72 |
| 200 | 4 | LOGISTICS SUPPORT | .22 | •28 | 91. | 94. | 990 | •24 | 2.00 |
| 7/ HC | 92 | OPERATIONAL SITE ACT | • 22 | •28 | •18 | 07. | 99 | 120 | 2.00 |
| ₹/#C | 96 | ANC | 07. | | 00. | 00. | 00. | 00. | •01 |
| ₹0.¥ | 87 | | .33 | . 42 | .27 | 99 | 1.02 | • 36 | 3.00 |
| R/0H | 8 | INITIAL TRAINING | •26 | 48. | •25 | 84. | .62 | • 20 | 2.40 |
| ₩ 00 | 8 | OTHER | 44. | •56 | • 36 | 39. | 1.36 | # · | 00.4 |
| | 36 | PECURE ING | 1373.12 | 2736,55 | 9.64 | 1381,76 | 32.66 | 1374.00 | 6568.81 |
| | 91 | CONTFACTOR | 1362.95 | 2722.86 | 3.42 | 1366.37 | 12,91 | 1363,33 | 6 (31.84 |
| 300 | 92 | MISSION HARDWARE PROC | 709.14 | 1417,39 | 66. | 7 16 1 3 | 3.75 | 7.05,25 | 3550.65 |
| ₹04 | 6 | INITIAL SPARES | 647.41 | 1294.77 | • 05 | 647.46 | •19 | 647.41 | 3237.29 |
| 200 | 76 | SUSTAINING ENGINEERING | .22 | .28 | 97. | 94. | 69. | 42. | 2.08 |
| 200 | 96 | ECP/EC0 | 44. | 950 | • 36 | 8. | 1.36 | 0.4. | 00.4 |
| #/CH | 96 | 1ST DEST TFANS/PKG | 2.63 | 4.86 | P4. | 3.66 | 1.63 | 2.64 | 15.32 |
| 30 C | 91 | SUST TOOL, TEST EQUIP | 1.75 | 3.24 | •59 | 2.04 | 1.09 | 1.78 | 10.18 |
| 200 | 36 | RIP-OUT, JISTALL, INTEG | 1.14 | 1.46 | *6 • | 2.08 | 3.54 | 1.25 | 10.40 |
| ည္ | 9,0 | OTHER | •25 | • 2 8 | •18 | 94. | .68 | 42* | 2.00 |
| | 100 | GOVERNMENT | 10.17 | 15,69 | 5.23 | 15.40 | 19.74 | 10.75 | 76.98 |
| 10 0 | 101 | | 2.70 | 5,03 | £4. | 3,13 | 1.61 | 2.75 | 15.65 |
| 2 02 | 101 | INITIAL SPARES | •1• | • 25 | -05 | • 16 | 90. | •14 | 9. |
|) (4) | 103 | SUSTAINING ENGINEERING | •25 | .28 | •18 | 94. | 99. | •2• | 2.00 |
| 10 | 104 | ECP/ECO | 44. | • 56 | •36 | . 80 | 1.36 | 4. | *.0.4 |
| ₹ 6 | 1.15 | 1ST DEST TFANS/PKG | 1.13 | 2 • 0 9 | •19 | 1.32 | 7. | 1.15 | 6.59 |
| Š | 106 | SUST TOOL, TEST EQUIP | •75 | 1,38 | •13 | . 87 | 94. | . ž | 4.36 |
| ₹ 00 | 137 | RIP-OUT, INSTALL, INTEG | 4.58 | 5.82 | 3.74 | 8.32 | 14.14 | 4.99 | 41.60 |
| Š | 106 | OTHER | •25 | .28 | ¥1. | 94. | 99 | .24 | 2.10 |

SHIP CLASS GOST SUPPARY LIFE CYCLE COSTS - 10 SHIP FLEET GFERATICA & SUPPORT FFASE (FYP9 BH)

| CHAN | 40 | CCST ELEMENT | 55 | FFX | 00-963 | AOE | ZIPGUN | BOCHER | TOTAL |
|--------|-------|------------------------------|--------------|--------------|---------|---------|--------|----------|---------|
| | : | | | | | | | | |
| | 5/7 | OFFRATIONS AND SUPFORT PHASE | 25 6 . 21 | 512.42 | 256,21 | 500.35 | 85.83 | 950 • 52 | 2562,11 |
| | 111 | OPERATIONS | 65.77 | 131.53 | 65.77 | 125044 | 45.27 | 223,89 | 657.66 |
| | 111 | CONTRACTOR | 63.61 | 87.22 | 43.61 | 86.76 | 3.48 | 171.49 | 436.04 |
| ¥ 6 | 112 | CONSUMBLES | 42.61 | 65.25 | 42.61 | £5.1E | 07. | 173.89 | 426.08 |
| į | 117 | 01167 | 1.06 | 2,03 | 1.00 | 1.60 | 3.00 | 1.040 | 10.00 |
| | 114 | GOVEDBRENT | 22.16 | 44032 | 22 .16 | 36.67 | 41.87 | 52.40 | 221.50 |
| 07.70 | 115 | | 18.00 | 36.00 | 18.30 | 31.50 | 31.50 | 45.00 | 160.00 |
| ŧ | 116 | HENY LEBS | 2.30 | 4 | 2.10 | 3.23 | 9.60 | 2.10 | 20.05 |
| 0#/#C | 117 | | 69. | 1.38 | 69. | 1014 | 1.80 | 1.20 | 96.9 |
| ** | 118 | CONSUMBBLES | .19 | 660 | .19 | 35 | .17 | 9. | 1.0 |
| ŧ | 115 | 0716 | 1.26 | 2.56 | 1.28 | 2.46 | 2.40 | 2.80 | 12.80 |
| ı | 126 | LOGISTIC SUPPORT | 188.92 | 377.85 | 168.32 | 373.15 | 36.00 | 724.50 | 1669.2 |
| | 121 | 5 | 3.24 | 6.4.8 | 3.24 | 5.10 | 9.72 | 4.54 | 32.4 |
| ŧ | 122 | | •30 | J 9 • | • 30 | 94. | 06. | 24. | 3.00 |
| ŧ | 123 | _ | •26 | • 5 5 | •26 | -45 | .78 | .36 | 2,6 |
| | 124 | | 2.28 | | 2.20 | 3.52 | 0909 | 3.00 | 22,01 |
| PR/CH | 125 | SPARE PAFTS, REPAIR MAT | 2.30 | 63.4 | 2.06 | 3.26 | 6.00 | 2.80 | 20.00 |
| Į. | 126 | | •26 | | •20 | .32 | 9. | . 26 | 2.0(|
| T O | 127 | DATA AND DOCUMENTATION | •50 | •5€ | •28 | • • | 40. | er. | 2.61 |
| ŧ | 126 | OTHER ILS | •20 | 9. | •20 | • 32 | •60 | ,2€ | 2.0(|
| | 129 | GOVERNMENT | 185.68 | 271.37 | 1.65.68 | 367.87 | 26.28 | 719,96 | 1856.8 |
| ŧ | 130 | SYSTEM ILS MANAGEMENT | . 80 | 1.67 | 9. | 1.28 | 2.40 | 1.12 | 8.0 |
| | 131 | | \$3 · 2 | 5.68 | 2.64 | 4.54 | 4.52 | 3.98 | 28.40 |
| ON/HC | 132 | MAINTENANCE FACILITIES | 1.64 | 2.88 | 1044 | 2,30 | 4.32 | 2.02 | 14.4 |
| ON/ NP | 133 | MAINTENANCE PERSONNEL | 1.20 | 2046 | 1.20 | 1.92 | 3.60 | 1.66 | 12.0 |
| ŧ | 1.34 | SUPPORT EOLIP MAINT | • 20 | 04. | •20 | .32 | • 60 | •28 | 2.9 |
| ŧ | 135 | SYS ENG, FIELD SERVICE | • 64 | 1.20 | •9• | 1. [2 | 1.92 | 96* | 9.4 |
| | 136 | | 160.01 | 361.81 | 160.90 | 366. 22 | 11.94 | 713,27 | 1809-09 |
| 07 IP | 137 | ۲ | .60 | 1.20 | 09* | • 96 | 1.80 | 40. | 9 |
| 0M/HC | 136 | SUPPLY FACILITIES | .72 | 1.44 | .72 | 1.15 | 2.16 | 1.01 | 7.2 |
| 10/31 | 1 39 | SPARE PARTS, REPAIR HAT | 176.92 | 357.65 | 176.92 | 357.6 | 00.49 | 710.50 | 1769.25 |
| ŧ | 7 | INVENTORY ABBIN | 95. | *85 | 94. | ** | 1.38 | 19. | 4.6 |
| ŧ | 141 | TRANS AME FACKAGING | •50 | 0 7 . | • 50 | .32 | 9. | •2€ | 2.01 |
| *** | 1+2 | • | • 30 | • 60 | • 30 | 97. | 96. | .42 | 3.0 |
| H | 1+3 | OTHER ILS | •20 | 04. | •20 | • 12 | 9. | •28 | 2.01 |
| * | 3 4 4 | CONTRACTOR - TRAINING | 0° ° | 00.0 | ٥٠٠٢ | 39 • 3 | 00.3 | 0.0 | 0.0 |
| M | 145 | GOVERNMENT - TRAINING | 26. | 1.84 | -92 | 1.47 | 2.76 | 1.29 | 9.2 |
| Z | 146 | CCNTFACTOR - OTHER | 930 | 99. | .30 | 97. | 96. | 24. | 3.01 |
| Ŧ | 1+1 | GOVERNMENT - OTHER | .30 | • 60 | • 30 | 94. | • • | 24. | 3.00 |
| | 146 | TCTAL | 2249.71 | 43.1.554 | 452.29 | 2690.50 | 815.97 | 2971.12 | 13519.1 |

148 TCTAL FOCTWOTE 1

| SLCCM Testcase data | | LIFE CYCL BY EQUIP | LIFE CYCLE COSTS BY BUDGET APPRCPRIATICA By Equipment element within Ship Class 10 Ship Fleet (FY79 SH) | UDGET AFPRCP WITHIN SHIP FLEET 9 SM) | RIATICA Glass | | | 40 |
|--|----------|---------------------------------|--|---|------------------|---|-----------|---------------------|
| \$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | ROTE | SCN MPN OFN ACN AFT CAN SYS TOT | Ndz | N 40 | | FF | NES CEN | SYS TOT |
| | • | | 1 | **** | | *************************************** | *** | • |
| CONTRACTOR | 52. 680 | 14.217 | 0000 | 9000 | 00000 | 00000 | 1.336 | 64.233 |
| GOVERNME NT | 34.620 | 7.873 | 6.300 | 6.103 | 000 | (.000 | 10.818 | 57.511 |
| TOTAL (C+6) | 91.500 | 22• 090 | 00000 | 0000 | 0000 | 000 | 12,155 | 125.744 |
| SECOND RACAR | | | | | | | | • |
| CONTRACTOR | 37 . 344 | 11. 374 | 0000 | 00000 | 6.000 | 00000 | 1.069 | 49.787 |
| COVERNENT | 31.07 6 | 6. 298 | 0.00 | 00000 | 9.0 | 000.5 | 6.635 | 46.211 |
| TOTAL (C+6) | 66.422 | 17,672 | 0.000 | 0.003 | 0000 | 0.000 | 90606 | 466.56 |
| MISSILE | | i | | | | | | |
| CONTRACTOR | 379, 382 | 1372,916 | 00000 | 00000 | 000.0 | 000 0 | 42.743 | 1795.041 |
| GOVERNMENT | 35.626 | 186.617 | 000.0 | 0.000 | 0.00 | (.000 | 10.485 | 232,930 |
| TOTAL (C+6) | 415.210 | 1559,533 | 0.000 | 0.003 | 0.00 | 000.0 | 53.227 | 2027.970 |
| SHIP CLASS TOTAL | | | | | | | | |
| | 469.406 | + 70A. ERC | 600 | - | 0.00 | 600 | 971 37 | 1017 |
| 60 MERCHE 21 | 105, 726 | 250.788 | | | | | 20 - 1 AB | 336.682 |
| 1014 (C+5) | 575, 132 | 15.90. 204 | | | | | 75.286 | 2240.712 |
| | | K | | | | | 200 | 27 1 10 6 4 7 7 7 6 |

SLECM Testcase Data

| | ROTE | SCN | Z G | N N | E CN | NGN | NEO | SYS TOT |
|------------------|-----------|--------|------------|----------------------------|-------|-------|----------|-------------|
| FIRST RADAR | | | | 7 7 1 1 1 1 | | | |) } ! |
| CONTRACTOR | 105, 360 | 000.0 | 28.434 | 0.00 | 0.203 | 000 0 | 2,672 | 136.466 |
| GOVERNMENT | 77.640 | 00.00 | 15.745 | 600.0 | 00.0 | 000.0 | 21.637 | 115.022 |
| TOTAL (C+6) | 163,000 | 000 | 44.179 | 0000 | 0.00 | 0.000 | 24.309 | 251.488 |
| SECOND RADAR | | | | • | | | | |
| CONTRACTOR | 0.003 | 000.00 | C-003 | 1.603 | 00:00 | 000 | 2.138 | 3.738 |
| GOVERNMENT | 00000 | 000.0 | 000.0 | 1.603 | 099 | 990.0 | 17.669 | 19,269 |
| TOTAL (C+6) | 0.000 | 0.00 | 0000 | 3.203 | 001-0 | 00000 | 19.807 | 23.007 |
| PISSILE | | | | | | • | | |
| CONTRACTOR | 758.765 | 0.030 | 2745, 631 | 0.103 | 0.000 | 000-3 | 85.485 | 3590.081 |
| GOVERNMENT | 71.656 | 0.003 | 37 3. 234 | C.003 | 000 | 00000 | 20.969 | 465.859 |
| TOTAL (C+6) | 630.421 | 00000 | 3119.066 | 600.0 | 0.000 | 000.0 | 106.455 | 4055.941 |
| SHIP CLASS TOTAL | | | | | | | | |
| | A 64. 125 | | 277 L. 26E | 4.600 | 6.5 | 900 | 406 - 30 | 2730.906 |
| CONTRACTO | 149,296 | | 388.979 | 1.000 | | | 60.276 | A 50 4 64 |
| TOTAL (C+G) | 1013, 421 | 000 | 3163,245 | 3,203 | 00.00 | 0000 | 150.571 | 4330.436 |

SLCCH Testcase Data

LIFE CYCLE COSTS BY BUDGET APPREPRIATION
BY EQUIPMENT ELHENT MITHIN SMIP CLASS
10 SMIP FLEET
(FY79 SM)

| 00-963 | ROTE | SCN | Zdz | N40 | ACN ACN | N N | ₹ 0 | SYS TOT |
|------------------|----------|---------|---------|----------|------------|-------|---------------|-----------|
| | | | | | | | | |
| FIRST PADAR | | | | | | | | |
| CONTRACTOR | 52, 660 | 0000 | 14,217 | 0 0.0 | 0000 | 000.) | 1,336 | 66.233 |
| GOVERNMENT | 38.623 | 0.00 | 7 . 873 | 0.003 | 9.00 | 000-0 | 10.018 | 57.511 |
| TOTAL (C+6) | 91,500 | 0.000 | 22,390 | 0000 | 00.0 | 000.0 | 12,155 | 125.744 |
| SECOND RADAR | | | | | | | | |
| CONTRACTOR | 37 . 344 | 000 | 0.166 | 11,374 | 00000 | 800.0 | 1.069 | 49.787 |
| GOVERNMENT | 31.070 | 000.0 | 0.00 | 6.298 | 000.0 | 1.000 | 6.635 | 46.211 |
| TOTAL (C+G) | 66.422 | 0.000 | 00000 | 17,672 | 000.0 | 0.00 | *96* 6 | 95.997 |
| PISSILE | | | | | | | | |
| CONTRACTOR | 700.0 | 9.000 | • 200 | 00.0 | 0.00 | 6.100 | 42.743 | 45.943 |
| GOVERNMENT | 0.00 | 0.00 | 177-125 | 6.00 | 0 . 1.03 | 0.00 | 10.485 | 187.610 |
| TOTAL (C+6) | 00000 | 000 • 0 | 177.325 | 0.000 | 0.00 | 0.00 | 53,227 | 230,552 |
| SNGP CLASS TOTAL | | | | | | | | |
| | 90.054 | 3.60 | 14.417 | 11.374 | 00000 | 000.0 | 45.148 | 160,962 |
| GOVERNMENT | 69.698 | 00000 | 184.997 | £ • 2 98 | 0.003 | 0.000 | 30.138 | 291, 331 |
| TOTAL (C+6) | 159,922 | 0.000 | 199.414 | 17.672 | 0000 | 6.000 | 75.286 | AE 2, 294 |

SLCCH TESTCASE DATA

| A0£ | ROTE | SCN | 1 I | OF. | 5 | 2 | ¥ ; | SYS TOT |
|------------------|----------|-----------|--------|-------|---------|--------|--------------|-----------|
| FIRST FADAR | | | | | | | | |
| CONTRACTOR | 165, 360 | 26.434 | 000.0 | 00.00 | £ • 000 | 000.3 | 2.672 | 136.466 |
| GOVERNMENT | 77.648 | 15,745 | 0.100 | 000.0 | 00.00 | 00000 | 21.637 | 115.022 |
| TOTAL (C+ 6) | 183.000 | 44.179 | 0000 | 0000 | 0.00 | 6.500 | 54.309 | 251.488 |
| SECOND RADAR | | | | | | | | |
| CONTRACTOR | 74.688 | 21.947 | 300 | 0.00 | 0000 | 000*3 | 1.069 | 97.704 |
| GOVERNMENT | 62, 156 | 11.796 | 00.0 | 700.0 | 0.000 | 000.0 | 8.635 | 62.787 |
| TOTAL (C+6) | 136.844 | 33.744 | 0.00 | 00.0 | 000.0 | | 486.6 | 164.181 |
| HISSILE | | | | | | | | |
| CONTRACT CR | 379,382 | 1373, 116 | 097.0 | 0.303 | 000.0 | C. 500 | 92.495 | 1637,983 |
| 60 VERNER! | 35.828 | 363,742 | 0.00 | 0.193 | 0.00 | 9.000 | 20.969 | 420.539 |
| TOTAL (C+G) | 415,210 | 1736. 858 | 6.306 | 0.00 | 6.69 | (.00 | 186.455 | 225 6.523 |
| SHIP CLASS TOTAL | | | | | | | | |
| CONTRACTOR | 559. 430 | 1423.497 | 000.00 | 0000 | 0000 | 00000 | 19.227 | 2072.154 |
| GOVERNMENT | 175.624 | 391.284 | 000 | 000 | 0000 | 0000 | 51.441 | 616.348 |
| TCTAL (C+6) | 735.054 | 1614.789 | 0,000 | 60.0 | 00000 | 000.0 | 140.667 | 2696.502 |

SLCCH Testcas Data

| | 1 | | | | | | | |
|------------------|---|---------|-------------|-----------|---------|--------|----------|----------|
| ZIPGUN | *DTE | SCN | 2 | OFN | #CN | N O | CMN | SYS TOT |
| FIRST RADAR | | | | • | | | • | |
| CCNTRACT OF | 105 - 36 | . t. d. | 0.00 | 78.4.34 | 0.000 | 0000 | 2.679 | 176.466 |
| GOVERNMENT | 77.640 | 000 0 | E 31 | 15.745 | | | 24 . 627 | 1000 |
| TOTAL (C+G) | 183, 163 | 0000 | | 0 0 1 1 1 | | | 200000 | 220 0077 |
| SECOND RADAR | | | , | 11:13 | • | 9 | 60000 | 221.400 |
| CONTRACTOR | 224.064 | 0.030 | 6 70 - 44.1 | 600.0 | 000.00 | 000 | 272 | 206. 950 |
| GOVERNMENT | 186. 46 € | 200.0 | 36.989 | 6.000 | | | 44.44 | 267.634 |
| TOTAL (C+ G) | 410. 532 | 30.00 | 104.431 | 1.003 | 0 - 0 0 | 000.0 | 49.518 | 564.461 |
| SHIP CLASS TOTAL | | | | | | | | |
| CONTRACTOR | 329, 424 | 0.00 | 67.441 | 28.43 | 00100 | 660.40 | A.0.4 | 477.74 |
| GOVERNMENT | 264.108 | 0, 200 | 36, 569 | 15.745 | 0.000 | 000 | 65.6 1R | 382.653 |
| TCTAL (C+G) | 593.532 | 3.000 | 16 4-4 31 | 44.179 | 0 • 000 | C. 000 | 73.627 | 615.969 |
| | | | | | | | | |

SLCCH TESTCASE DATA

| | 1 | | | | | | | ********** |
|---------------------|-----------|-----------|----------|-----------|-------|---------|---------|------------|
| BOOMER | 40 TE | SCN | Z Z | O PN | ¥C. | N. | CR | SYS TOT |
| FIRST RADAS | | | | • | | • | | - |
| CONTRACTOR | 105, 360 | 3. 303 | 28.4.34 | 196 | 6.00 | 0000 | 2.672 | 116.466 |
| GOVERNMENT | 77.643 | 0.003 | 15.745 | | | | 21.617 | 445.822 |
| TOTAL (C+G) | 183,000 | 0.00 | 6 6. 179 | 6000 | 3,680 | 0.00 | 24.309 | 261. LAA |
| MISSILE | | | | | | | | |
| CONTRACTOR | 379.362 | 1373,516 | 30, 41 | # 0 6 · Q | 0.603 | C. 000 | 170.971 | 1923.A69 |
| GOVERNMENT | 35, 628 | 717. 992 | 00.40 | 0.363 | | 00000 | 619.93 | 795.758 |
| TOTAL (C+G) | 415.210 | 2091.507 | 000 • 0 | 0000 | 00000 | 000.3 | 212,909 | 2719.627 |
| SHIP CLASS TOTAL | | | | | | | | |
| | | | | | | | | |
| CONTRACTOR | 484.742 | 1373, 516 | 28.434 | 0.000 | 6.000 | 0000 | 133.643 | 2060.335 |
| GOVERNMENT | 113,468 | 717, 592 | 15,745 | 0000 | 003.0 | 900 | 63.576 | 910.780 |
| TCTAL (C+G) | 596.214 | 2091.507 | 44.179 | 0 • 0 0 0 | 0000 | 000 • 3 | 237,219 | 2971-115 |
| 10 SHIF FLEET TOTAL | | | | | | | | |
| | | | | | | | | |
| CONTRACTOR | 2797.151 | +195.519 | 2664.558 | 41.408 | 0.603 | 00000 | 451.478 | 10370.113 |
| GOVERNMENT | 876.120 | 1310,063 | 626,711 | 23.643 | 0.000 | 6.300 | 301.37 | 3139,915 |
| TOTAL (C+G) | 3675, 271 | 5505.582 | 3511,269 | 65.451 | 0.00 | 00r.u | 752.855 | 13510.029 |
| | | | | | | | | |

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